

STATE OF CALIFORNIA
ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

Implementation of Restructuring)	
Legislation (Public Utilities Code)	Docket 96-REN-1890
Sections 381 and 383 [AB 1890]):)	
Renewables)	
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RENEWABLES PROGRAM COMMITTEE HEARING

RE: Committee Draft Report

Thursday, February 27, 1997

10:00 a.m.

Held at the

California Energy Commission

1516 Ninth Street, Hearing Room A

Sacramento, California

REPORTED BY:

S. RICE

COMMISSIONERS PRESENT
(Alphabetically Listed)

MICHAL MOORE

JANANNE SHARPLESS

STAFF PRESENT
(Alphabetically Listed)

MANUEL ALVAREZ

JONATHAN BLEES

MARWAN MASRI

MADALEINE MEADE

ROSELLA SHAPIRO

TIM TUTT

ALSO PRESENT
(Alphabetically Listed)

RIC E. ABEL, Prudential Capital Group

JOE ACKLER, British Petroleum Solar Inc.

JEFF ADAMS, State Lands Commission

CRAIG ANTHONY, State of California, Department of Forestry

CHRISTO ARTUSIO, Environmental Defense Fund

DON AUGENSTEIN, IEM

LARRY L. BERG, Ballard Power Systems

JOHN BERLIN, NCPA

JIM BIRK, Electric Power Research Institute

ALBERT G. BOYCE, V, Boyce Resource Development Co.

ALSO PRESENT
continued

ROSS BURGESS, Supervisor, Trinity County

JOHN BURTON, Integral Design

JIM CALDWELL, CEERT

BILL CARLSON, Wheelabrator Environmental Systems Inc.

SONEILA CRANE, SCE

TOM DUNPHY, Lamont

MICHAEL T. ECKHART, Solar Bank

KAREN EDSON, E&M

BOB ELLERY, Sierra Pacific Industries

RICHARD D. ELY, ADM Associates, Inc.

DIANE FELLMAN; Goodin, MacBridge

RICHARD FERGUSON, Center for Energy Efficiency and Renewable
Technologies and the Sierra Club

LENA FORD, Modesto Irrigation District

GEORGE FRYE

JOSEPH GRECO, VAE Energy

STEVEN F. GREENWALD; Davis, Wright, Tremaine, LLP

THOMAS C. HINRICHS, Pacific Energy Consultants, Inc.

TOBBIE HOPPER, Valley Air Conditioning

LON HOUSE, ACWA

CAROLYN ANNE HUNT; Milbank, Tweed, Hadley & McCloy

JAMES R. HUNTER, Policy and Planning Associates

ALSO PRESENT
continued

JOHN M. HUNTER; Hunter, Ruiz

ROBERT L. JUDD, California Biomass Energy Alliance

STEVEN KELLY, Independent Energy Producers

JAMES R. KENNELLY, Project Development

DANIEL KIRSHNER, Environmental Defense Fund

BILL LAX, San Joaquin Valley Energy

MARK E. LEARY, Browning-Ferris Industries

CHUNG LIU, South Coast Air Quality Management District

CRAIG W. LOKE, Canyon Energy

JODY LONDON, Working Assets

KATHY LYNCH, Lynch and Associates

RICHARD McCABE, Advanced Energy

TANDY McMANNES, KJC Consulting Company

ERIC L. MILLER, Foresight Energy

MAURICE E. MILLER, Advanced Energy Systems

PETER M. MILLER, Natural Resources Defense Council

JACK MONGER, The Monger Company

GREGORY P. MORRIS, Future Resources Associates

MICHAEL J. MURRAY, Pacific Enterprises Company

LES NELSON, California Solar Energy Industries Association

(Cal SEIA)

GUY R. NELSON, The Energy Solutions Company

ALSO PRESENT
continued

ERIC J. NEWMAN, Kahl Pownall Advocates

MAUREEN PALMER, Enron Capital and Trade Resources

ALAN J. PURVES, Laidlaw Gas Recovery Systems

NANCY RADER, American Wind Energy Association

WAYNE RAFFESBERGER, Esquire

R. D. (DALE) ROGERS, Rockwell International Corporation

JOHN W. SCHAEFER, Acurez Environmental Corporation

LAURA SCHER, Working Assets

RICHARD SCHERER, Electro-Thermal Equipment Corporation

MILTON SCHULTZ, Burney Forest Products

ROBERT W. SCHURHOFF, Rumla, Inc.

BILL SHORT, Geothermal International Investors Group

LAWRENCE T. SLOMINSKI, United Solar Systems Corporation

RICHARD V. SOWTER, British Petroleum Solar Inc.

JEFFREY SPRECHER, Western Power Group Incorporated

MICHAEL STERN, Utility Power Group

BARBARA PEPPARD SUTAK, Pacific Gas & Electric Company

RONALD L. TOM; Damrell, Nelson, Schrimp, Pallios & Ladine

KATHY TRELEVEN, Pacific Gas & Electric Company

CHRISTOPHER R. TROTT, Pacific Wood Fuels Company

MARIANNE WALPERT, Pacific Solar

ROBIN J. WALTHER, Southern California Edison

ALSO PRESENT
continued

HOWARD J. WENGER, Pacific Energy Group

JOHN WHITE, CEERT and the Sierra Club

DANIEL D. WHITNEY, Sacramento Municipal Utility District

MASAMI KOBAYASHI WIESNER

KEN WISEMAN, Consumers Utility Advisors, Inc.

RYAN H. WISER, Lawrence Berkeley National Laboratory

C. E. WOODS, Calpine

PAUL WVEBBEN, South Coast Air Quality Management District

RYUICHI YAGI, TRI

LYDIA ZAININGER, Deutsche Bank AG

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P R O C E E D I N G S

COMMISSIONER MOORE: Good morning. I'm Michal Moore. I'm a Commissioner here with the California Energy Commission, for those of you who don't know me.

I'm joined on the dais by my colleague, Jan Sharpless; on my left, her advisor, Rosella Sharpless; and my advisor, Manuel Alvarez. Shapiro. Excuse me. I was trying to move too fast here. And my advisor, Manuel Alvarez.

We may be joined on the dais during the day by other Commissioners who are in the building and are, of course, welcome to come because they'll be voting on this in a short amount of time, in any case.

We're here to consider the Committee Draft of the Renewables Report of Assembly Bill 1890, which is due from us to the Legislature on March 31st this year.

This Draft, which I will review the high points of here this morning, represents the Committee's thinking, the Committee members' thinking on how to allocate the \$540 million that are estimated in the bill. It represents our opinions about not only the allocation but the formulas and the philosophy that underlie them.

This is a departure from the original Staff Report. And the consequence of that is that since the Staff has been very supportive of us but, in fact, other than the mechanical event, this does represent the Committee thinking.

And, as a consequence, I've asked the Staff to be here as a resource for us. But, in fact, the direction that's been given on this reflects that of the Committee and not the Staff necessarily.

However, I would point out that I might have been remiss in this, and I want to take just an opportunity to rectify the circumstances. We have one of the hardest working group of people that is possible to have, I think, and dedicated on a report like this. And I'd like to acknowledge them. They have not always agreed with the Committee. But when we've reached a consensus, they've swung in behind us and supported us one hundred percent of the way.

And I believe they deserve recognition for their efforts. They're tremendously hard-working people. So if I could just ask you to raise your hand, when I call your name, I'd like to acknowledge your contribution to us and to the Report.

Cheri Davis is here and Bob Huffaker is here. Bob is long-suffering at the hands' of the Committee, and he's developed a tremendous sense of humor as a result of this. And we all appreciate that very much.

Pramod is here. No? Sandy Miller and Vince Schwent. Is Vince here? So some of the Staff are clearly -- Vince is there standing up in the back. Tim Tutt is at the table in the front. Suzanne in the second row, who we absolutely couldn't have done this without, for her hard work in making the drafts come about.

And, of course, our Project Manager, Marwan Masri. And is Marwan here? He's still on the second floor, probably listening on the squawk box, safely out of range, watching through heavy lenses. As I said, we have a very dedicated staff and we're lucky to have them, and I want to acknowledge them.

Let me briefly go through the high points of the Report, and then I'll describe the characteristics of the hearing that we're going to have today.

We've proposed to allocate and distribute the AB 1890

funds in this way. We've created an existing technologies category, and we propose that 45 percent of the funding go into that category through three technology tiers with funds distributed on a cents-per-kilowatt-hour production credit tied -- and I want to be clear about this -- tied to market clearing prices. So the concept of the current or future SRAC is very important in this category.

We've created a new technology section. We've allocated 30 percent of the funding to that group. Funds would be allocated through a competitive bid and distributed again through a cents-per-kilowatt-hour production credit.

We've created an emerging technologies category. We've allocated 10 percent of the funds to that. The funds will be allocated through a competitive RFP and distributed through a project-specific support mechanism based on that RFP.

We assume that these funds, if not allocated or used in the early years, will roll to the later years and, in fact, that in the out year, year time T5, that there will be a reevaluation of those funds and that a certain amount of them would go into emerging technology and the balance would go into the consumer account in which we have initially allocated 15 percent of our funds, 14 percent of those allocated and distributed through a cents-per-kilowatt-hour consumer credit -- we expect aggregators to make use of those -- and one percent of the funds allocated to a consumer-information and market-building system.

In other related issues we've established a certification process where in-state renewable suppliers and providers are both required to self-certify with us, with the CEC. That's the proposal.

The certification and reporting use for the payment of the -- will be used for the payment of the 1890 funds and for the

go-first, direct access provision that we've cited in the Report.

In terms of microgen and cogen for pollution, we find that microgen and cogeneration from VOCs do require help to remain competitive. We're not specific about the type of help, but we list alternatives.

The CEC Committee also find that fuel cells should qualify as fuel switching and that fuel cells using renewable fuels would qualify as renewable technologies.

With those highlights, let me say to you that we have a Report which you've all had access to. We intend to, as a result of this hearing, take counsel from the testimony that you give us regarding this Report and make final adjustments prior to our submission to our colleagues, where we expect to hear this sometime in the second or third week in March prior to our submission to the Legislature.

In today's hearing, as you can expect, this is not a time for infomercials. Frankly, we've had the benefit of many of your submissions about the value of individual technologies, the contribution that they make to the economy, to local government, to consumers and ratepayers and shareholders. We believe you.

And where we really believe you we've taken notes and taken cognizance of the points you've made, and they show up in the Report.

If you didn't see it in the Report, we didn't believe you. And you probably aren't going to get a lot farther by reiterating it today. So there's no need for infomercials. There's no need to reeducate us about the value or the contribution or the tremendously varied world value of the industry that you represent. It's probably not going to gain much credence at this hearing.

What we want today is to ask you to, first of all, tell us if we've made some egregious error in our presentation. Obviously we would be interested, if we'd made a calculation that was in error. Or if we have used an assumption that is in error, we'd like to know it. Clearly we don't want to submit something to the Legislature that is inaccurate or is unfair in one way or another because of its inaccuracy.

Second, if you've got a point that you'd like to make that we seem to have overlooked or that you think an adjustment is possible, we would like to hear that. It's a reasonable criticism of the Report. Let me guide you in this matter, though.

We've heard from people who suggest that we've shorted the account in one area versus another and that one group ought to get another three percent, another five percent. If you offer testimony today that says, "I need another five percent," don't end the sentence without adding on, "And I expect it to come out of some other account."

If you want more money, you think you've been gouged, I want to know where you think it should come from. Because we've done our damndest to try and get into these accounts and understand what the fairest allocation is. So don't -- we've been on the spot, and we've put our cards on the table. Don't offer us a comment that says, "I want five percent more," without telling us where that five percent ought to come from. It's too late for the other system.

Finally, we have a number of participants who want to play today. I'm going to ask you as politely as I can to keep your comments to under 10 minutes at the absolute maximum. I'm going to try and direct things to under five minutes.

Again, you've got the Report in hand. Cite the pages.

If you've got written testimony, we'd like to obviously have it. If you plan to submit testimony, you tell us today as you're speaking that you're going to hand in something written later, that's fine. You've got until eleven o'clock tomorrow morning to do that. After that, it won't be accepted -- or it won't be relevant, because we won't be able to process it.

So with that I'm going to open the hearing and ask for testimony on the Report. Again, if you've got a problem and you have a page cite that's specific, you've got a problem with page XX, please give us the cite. The Staff will be taking notes. It's going to help us, when we go through and caucus on this, to understand exactly where your concerns are. So make it as easy -- oh, excuse me. I did overlook.

Marwan has some errata that he would like to announce. We consider them to not be major in nature, but if you all have your reports, you should take note of this. There are not very many of them, but just to make corrections, rather than us reprinting it and handing them out.

So, Marwan, would you elaborate on those?

MR. MASRI: I'll be glad to. Thank you, Commissioner.

We will be making these changes in the Final Report that will be published hopefully by the 9th of March for adoption by the Commission. And, again, as Commissioner Moore said, these are not really major changes. And I'll describe them to you.

Figure 1-1, the pie chart that has generation by technology and gigawatt hours. This is on Chapter 1, page 4, Figure 1-2.

The previous chart was based on data from the Renewables Working Group Report that was done with assistance from the Staff

of this Commission. We have since received some data from the utility that gives us a different distribution of energy among the different technologies.

The two changes are, you will see that in the Final Report, basically is some part of biogas and some part of MSW were included in biomass previously. These now have been pulled out and allocated where they belong.

So the new biomass number is 4,410 gigawatt hours or 16 percent of generation.

And the new number for biogas is 1,391 gigawatt hours or five percent of generation.

And the new number for MSW is 426 gigawatt hours. That's one change in that pie chart, taking some of biomass and allocating to biogas and MSW.

The second change is solar thermal generation. The numbers in the Working Group Report had generation only from the renewable portion of the solar, the SEGS system. And since the definition in this Report is that anything 25 percent or less is a hundred percent renewable, we now added back the gas portion of that generation. So the new number for solar thermal generation is 797 gigawatt hours or three percent of the total generation.

Those are the changes on that pie chart.

These next changes will be on the Appendix. There are some typos and small changes we need to make to make the Appendix consistent with the main body of the Report.

Appendix A, page A-1, in the discussion of Tier I

allocation for biomass, the first paragraph, third sentence should read, "In this tier, the price cap is 1.5 cents per kilowatt hour in years 1 and 2 and 1 cents per kilowatt hour in years 3 and 4."

Again, we are making this consistent with the body of the Report where the price cap is 1.5 cents in the first two years and drops to 1 cent in the second two years. No change, really, here except for consistency.

The second change is on page -- again Appendix A -- page A-3, the first paragraph, the fourth sentence should read, "In addition, wind turbines can repower and access funds from the New Technologies Account if they negotiate buyouts of their SO2 and ISO4 contracts," instead of "forfeit their contracts." That's what we meant to say, "negotiate a buyout."

Appendix A again, page A-3, the next change, second paragraph, the first sentence should read, "In response to the needs of the wind industry, the Committee proposes to group wind technologies in Tier II with landfill gas, with an overall allocation of 15 percent of funding." Delete: "Biogas," "municipal solid waste" and "waste technologies."

Again, this change makes the Appendix consistent with the body of the Report, which is a correct statement of this allocation.

The final change is on Appendix A, page A-3, the Landfill Gas section. Delete the third sentence, which has some typos in it, that begins with "The Committee recommends allocating," to the end of that sentence.

And we will be including these changes again in the next issue of the Report. And that concludes the changes that I have.

COMMISSIONER MOORE: Thank you, Marwan.

And I should add: For those of you who are wondering what the stack of envelopes up here is, I was going to ask Laura Scher to address them, but she wants to speak later in the hearing.

So let me just say that to date, thanks to putting my name up on the Internet with an admonition for a good-time call this number, and in addition to the Garden Show in Mendocino publishing my name, phone number and for a good-time call him any time on electricity matters, 13,663 letters came in admonishing us to do the right thing on creating a green market.

So if you just want to know what my office has been doing with Laura Scher's mail, you can see it right up here. So I expect we'll be hearing from Laura later in the hearing.

Thank you.

First speaker, Steven Kelly from IEP.

MR. KELLY: Commissioner, if it's all right, Bill Carlson would like to precede me in representing the coalition renewables industry.

COMMISSIONER MOORE: Sure. Bill.

MR. CARLSON: We've worked out a deal here actually where he's going to watch the other's back while they're speaking.

COMMISSIONER MOORE: I love deals. I thought only the Commissioners had to worry about that.

MR. CARLSON: Oh, no. Oh, no. That's because you haven't heard the comments yet.

COMMISSIONER MOORE: I see.

MR. CARLSON: I am Bill Carlson of Wheelabrator Technologies, and speaking here today jointly with Steve Kelly from IEP.

And I'm actually representing today the Renewable Industry Coalition, which grew out of a request that you made at the first Renewables Program Committee hearing in November where you instructed the renewables industry to forge a consensus on the allocation of AB 1890 funds for support of renewables.

Representatives of the biomass, geothermal, solar and wind industries, representing over 95 percent of all existing renewable capacity, met, negotiated and returned to you with such a consensus proposal.

That hard-fought proposal has been modified by the renewables industry based on additional input from CEC Staff and you, the Commissioners, and based on the necessity to include other participants.

Through it all the renewables industry has maintained that coalition that formed around the consensus proposal, and it is that coalition that provides comments today on the Committee Draft.

The Renewable Industry Coalition represents over 4,000 megawatts of renewable capacity, the installed investment in excess of \$7 billion. These are the small, dispersed generators that provide diversity and add reliability to California's electric infrastructure. They are often the mainstay of the economy of a rural community and work in concert with other elements of that economy, for example, in the areas of forestry and agriculture.

And if that sounded like an infomercial, I'm done with it now.

COMMISSIONER MOORE: Oh, no. You're on safe ground.

MR. CARLSON: Like our original consensus proposal, the CEC Draft Report has undergone numerous revisions. And with a few key exceptions, it is today a far better document than that which preceded it.

There is much to like in the Committee Draft including:
The use
of generation production incentives as a primary means of allocating AB 1890 funds as this is the simplest, most cost-effective and most market-based approach for incentivizing renewable generators.

Second, the ramping down over time of existing project support and the ramping up of new project and customer incentive support, thus forcing existing projects to market instead of to a second cliff, and allowing time for development of new projects and of a renewables market.

Third, the bundling of technologies into three tiers with target SRACs and incentive caps based on the economics of the technologies in each tier.

Fourth, a rolling over a funds within each tier to even out the historic volatility of SRAC, which is likely to increase under the restructured industry, and the use of funds for other categories at the end of the transition period if not needed for project support.

Fifth, the raincheck proposal that allows time to make project improvements without losing your economic place in line during the transition period.

Sixth, the customer incentive package that financially encourages innovative, new ways to line up customers for renewable power and gives us a chance to overcome the CTC drag on reaching new customers during the transition period.

By allowing support from both existing and customer incentive programs simultaneously, we stand a fair chance that some will choose to negotiate a termination of their existing contracts.

Seventh, the straightforward self-certification process for both suppliers and providers.

And, finally, the establishment of funds for a renewable market development program and the acknowledgment of the need for a renewable power exchange.

Several of the programs listed above are only sketched in concept in the Committee Draft. And the Renewable Industry Coalition looks forward to the opportunity to work with you on developing these programs so important to the future of the renewable industry in California.

There are, however, a very few key items that prevent the Renewable Industry Coalition from endorsing the Committee Draft and would prevent us from supporting it at the Legislature, should it go forward in its present form.

These make-or-break items for the Renewable Industry Coalition are as follows, and there are five.

Change the allocation for existing Tier I from 25 to 30 percent, -- comma -- to be accomplished by dropping the emerging allocation from 10 to five. I did have a period there, but you said don't finish the sentence without...

COMMISSIONER MOORE: You're right on target so far.

MR. CARLSON: This brings the total allocation for existing resources to 50 percent of the AB 1890 total.

Biomass and solar thermal, which make up Tier I, are the technologies clearly mentioned for support in AB 1890. And 30 percent is the minimum allocation that will ensure their survival and transition to market.

On the other hand, numerous other funding sources are available to the emerging category, which were not mentioned in the Report, but which assure continued, timely development.

Second, application of a screening methodology to landfill gas generators and existing Tier II prior to receiving AB 1890 funds. No funds would be disbursed to landfill gas generators owned by municipal or county governments or selling their output to a municipal utility. Royalties and other payments by generators paid to municipally- or county-owned landfills that exceed five percent of electric revenues shall be deducted from AB 1890 incentives that would otherwise be due.

These additions will prevent AB 1890 funds from going to those who have other cost-shifting mechanisms available to them, or to munis whose consumers did not contribute to the fund.

Third, a bidding protocol must be established for new projects that consists of the following: A, a demonstration of site control and project feasibility to accompany bid; B, a single bid submitted for a single site and project; C, incremental additions to an existing site or an enhancement of existing production to be considered new provided they are done outside of an existing utility contract; and, D, the start-up date for successful bidders to be extended to the end of the transition period, December 31st, 2001.

In addition, to allow the funds to be used for as many new megawatts as possible, the Committee should add up financing options as acceptable uses of the funds as well as front-loaded production incentives. There is no reason that new projects should be any different than emerging projects in this regard.

Also, fund payout should be extended over a 10-year period if requested by the successful bidder.

Number four, industrial customers should not be excluded from the use of customer incentive funds. Due to a more readily reachable market and a lower CTC, these may be the only substantive customers available to renewables early in the transition period. To prevent industrial customers from receiving a majority of the incentive funds, this category could be limited to its historical share of California's electrical load or could be placed in a hierarchy below residential and commercial customers.

In addition, the amount per kilowatt hour the customer incentive needs to be fixed in advance to facility marketing. It will be impossible to market to customers an unknown incentive as currently described.

And, fifth, the date for establishing whether a resource is existing or new should be an in service date of September 23rd, 1996 rather than the January 1, 1998 date in the Committee Report.

The resolution of the above five items are all that prevents the Renewable Industry Coalition from endorsing the Committee Report and moving forward together at the Legislature.

There are many important items that our various members and their associations will present to you in writing, and probably some verbally today, but none of these rise to the level of the five issues that I just outlined.

It is our sincere hope that these items can be addressed and corrected in the Final Draft of the Report. We have come a long way in this process together and would like to complete this journey together. It is certainly not our desire to go through this process again at the Legislature.

Thank you for the opportunity to participate in this project, in the process that is so important to our collective future. Thank you.

COMMISSIONER MOORE: Thank you, Mr. Carlson.
Thoughtful remarks.

Mr. Kelly, did you want to...

MR. KELLY: Steven Kelly representing the Independent Energy Producers Association of California.

I want to be relatively brief and focus on a few issues that I want to bring to the Committee's consideration.

First of all, I do want to remind the Committee that IEP is somewhat of a unique circumstance, having a full range of renewable technologies that are part of our membership. And I can appreciate the difficulty that your Committee has in trying to develop a program that works, because we certainly have the same problem from our side of the ledger.

We would like to congratulate the Committee on what we think is very much progress in the Committee Report from the earlier drafts. We believe that the implementation procedures and the funding and distribution mechanisms that the Committee is proposing go very far toward attaining and meeting the intent of AB 1890, specifically the differentiation of technologies by tiers, the front-loading for existing and the back-loading for new and emerging that's going to reflect their needs in the transition

period. The development of the customer-based market. Structure through the application of customer credits. And the consideration of a renewable clearinghouse. And also the relatively simple self-certification process.

If I exclude anything that's not listed in that it doesn't mean that I don't agree with them, it's just that for time considerations I wanted to point out that we do think the Committee's done a very good job of mixing and matching some very difficult issues.

I would also like to say that, on behalf of the industry as a whole, we have been involved in this process since the very beginning. And that process has resulted in a great deal of compromise, from our perspective, from what we're expecting to see come out of AB 1890.

And just for a little bit of background I would like to bring those to your attention so that you can understand where our industry now sits.

The concepts that we are now accepting, which have taken a great deal of pushing and pulling to get to, is basically an acceptance of an allocation level that is significantly less than the 60 percent that might have been available through the implementation of AB 1890 because of the constraints on the 40/40 split. We estimate that that is roughly an economic value of 54- to \$81 million, a net outflow from existing projects.

The acceptance of a significant percentage of the funds to be directed toward the customer incentives is something that's relatively new that was not really in the forefront, I believe, in the discussions in August, and something that we embrace. But that also results in what we see as a flow of moneys from the existing projects to the new and emerging. And while we welcome that, we just want to bring that to the Committee's attention.

There's also the acceptance basically of the treatment of repower projects, which is, as you've proposed here, is somewhat different than what was being discussed in August. We understand your reasoning, and are proposing to move forward based on that reasoning. But that too represents a compromise from the industry perspective on where we were back in late summer, where we would have liked to have been based on our expectations.

If I were to quantify these kinds of compromises, I would say that that affects roughly 25 percent of the funds available that we have moved off, and which I believe reflects a lot of movement from the industry. Even from your perspective you may not see as much movement as you would have liked.

But that leads us to a couple of key issues that still remain that stem from the Committee's Draft proposal. And I would like to reiterate that, in the whole, we support the comments made by Mr. Carlson for the Industry Coalition. And we'll just briefly highlight some of the issues that we have, and maybe create more illustration of this sentiment and where we'd like to see the Committee go.

Specifically, as you know, one of our major concerns is and remains to be the allocation for emerging technologies. We have submitted testimony in the past that we thought that, consistent with the intent of AB 1890, the allocation for emerging ought to be in the four- to five-percent range.

We note that the Committee Draft has a lot of advantages for emerging technologies. And if I can just illustrate those from our perspective. One is the fixed allocation of 10 percent of the funds.

Secondly, there is the allocation of an additional three percent of the total funds potentially to emerging technologies if there's any rollover of funds in the fifth year.

And, third, we believe that there's a preference for emerging technologies vis-a-vis the new technologies in that rollover by creating a process that allocates the first 16 million of any rollover in the fifth year that would allocate that directly to the emerging technologies.

And, finally, unlike the existing and new technology accounts, the proposal for emerging does not place on that technology any cost caps that would compel those facilities to become as market competitive as possible during the transition period, at the end of the transition period; which, from our perspective, all of those advantages in this Draft proposal are enhancements to the emerging technology field, and we look to be something that can buttress, be used to buttress our recommendation that perhaps the fixed allocation for the emerging technologies ought to be reduced from a 10-percent level to a five-percent level.

We note that that kind of change from a 10-percent allocation on a fixed basis to five percent is perhaps an annual change of 5- to \$6 million.

And we note that since the last time that we were before you, this Commission has received the regulatory authority to distribute and allocate what were previously RD&D funds in the PUC. And we applaud that.

In doing that, though, the PUC has basically delegated, I believe, or transferred to this Commission full authority on where those moneys would go. And I recognize that you are in a process to determine how those moneys ought to be allocated.

Those funds are \$62.5 million per year without a termination for that program. From our perspective, the difference between the five and the 10 percent that would reflect the difference between what we would propose and what you have offered in the Draft Proposal is something that ought to be

utilized out of the RD&D fund. And your Commission is at full discretion to be able to do that, to direct those funds to technologies like the emerging technologies which may be post-demonstration but certainly appear to be precommercialization.

And we would urge the Committee to consider looking at that pot of money, which is quite sizable and represents about \$250 million over the course of this renewable program, as a mechanism to supplement the funding needs of the emerging technologies.

If you are able to accomplish a reduction in the funding for emerging from 10 to five percent, as we would suggest, you end up with a split between existing and new and emerging of 50/50, which seems to be a compromise, an equitable compromise, between the disparate parties on this issue. And we would urge the Committee to seriously consider that.

A second main concern that we have is a Tier II concern. It's the linking together the wind generation facilities with the landfill gas facilities. These two types of technologies have very different operational characteristics. One is basically intermittent; the other is basically baseload.

They also have, in some cases, relatively disparate ownership characteristics, in that some of the landfill gas facilities are owned or controlled by municipal utilities or municipal entities, public entities; which, from our perspective, have the power themselves to help rectify any economic shortcomings that those technologies may bring to the table in the competitive market.

So what we would urge the Committee to do is seriously consider the development of screening criteria that would identify those kinds of facilities that have those distinct advantages and create a criteria that would screen them out and place on to their

municipal utility affiliates or owners the responsibility for generating the requisite revenues that those facilities require to continue to operate.

Secondly, regarding Tier II issues, it may be helpful to help smooth the potential conflict between the wind generation and the landfill generation. If you weighted the allocation of the funds for that tier on a monthly basis so that what we've got basically is a situation that would --- a great deal of the wind generation occurs in a rather limited timeframe during the year, basically the second and third quarter of the year, primarily April through June and July. That's when the wind industry is generating at its most. And if there is no rectification for that lumpiness in generation for wind, we end up with a situation where the landfill gas facilities, which again are relatively baseload, are able to capture the bulk of the moneys in that fund prior to the wind even operating. So I raise that to your attention also.

I would just briefly reiterate Bill Carlson's comments on the customer incentives. Everything that we are hearing from our folks and marketers is the need to create a fixed customer incentive amount rather than a nonfirm amount as it is in the proposal. And I raise that distinction. It's really kind of a nonfirm issue as opposed to a firm issue from a business perspective.

Parties that are trying to conduct and close on bilateral deals will have a much easier opportunity to do that if that amount that they're dealing with is fixed. And we don't specify what that fixed amount might be or how long the term would be, but we just offer that up.

And it may be possible that you could fix the amount and differentiate it by customer class. That may be --

COMMISSIONER MOORE: Mr. Kelly, I've got to ask you to

wrap up.

MR. KELLY: Sure.

Finally, I do think on the flexibility for the determination of financing new resources, we'd like to see some flexibility developed in the Report that would open up the opportunity for later consideration of a funding mechanism, a pool, a financing pool, if we can develop one.

And, finally, I reiterate Bill Carlson's concerns and comments regarding the date that would distinguish the new and existing. We prefer the January -- or the September 23rd, 1996 date, the date of the passage of the legislation. We look at the January 1 date, '98 date, as tied to the expected development of the new market structure. But there are a lot of impediments that lay in the wait before that occurs. There's a lot of decisions from the PUC and FERC on that matter. And that date -- it's not clear whether the new market is going to be operational, or the extent to which it'll be operational on that date. So we think the date of the passage of the bill -- put everybody on notice as to when the things were changing, and that works probably a little bit better.

So, in summary, we believe that we are very close in moving with you to the Legislature in supporting your proposal. We fully appreciate all the work that you've done on this and think there's some very creative ideas there. And we look forward to resolving these last remaining issues.

COMMISSIONER MOORE: Thank you. Mr. Kirshner.

MR. KIRSHNER: Hi. Dan Kirshner for the Environmental Defense Fund.

I want to state that the Committee has produced a very

thoughtful document in terms of being well reasoned and having rationales all the way through for various decisions that have been made.

I think that's obvious to us. I also hope it will serve us well at the Legislature, that they will see that you've really spent a lot of time grappling with all the issues. There's nothing here that can be said to be taken -- any decision here to be taken lightly or without due consideration. For that, I think we all owe our thanks.

I just wasn't expecting to be up so fast.

[Laughter.]

COMMISSIONER MOORE: Now, you know, as Monty Python says, always expect the unexpected. And in this forum --

MR. KIRSHNER: So that ends my prepared remarks.

I'm waiting to hear more -- I mean there's been some concerns expressed over a one-shot auction. And I think that people have to remember that -- it's not something I proposed, or these are not my ideas.

And I haven't had any discussions with Staff or the Commission or the Committee over what was meant by the one-shot auction. But just in thinking it over, I mean as a package it makes sense to me. That is, it's got -- a one-shot auction by itself would not make sense to me.

As you know, we earlier proposed a series of auctions to give people market experience. But the design here is a one-shot auction with a cap and the possibility of another auction, if that's undersubscribed. And that does make a lot of sense to me. That without the cap it wouldn't make sense. But as a package deal, it does make sense.

I'm waiting to hear what other thoughts are.

And, quick reaction, I mean the only thing I can take a quick reaction to is our first proposed reallocation. And at this point I just don't see a basis for it, except for a statement of what AB 1890 intended. And I wasn't there as much as some people, but I was there and I just -- that was one of those things that was sort of the little job they left to you.

Our preferences are, as stated often, are more towards new and emerging rather than continuous support, existing, that have standard offer contracts.

Finally, I think that the direction you've taken with the customer incentives is very interesting and very good. I had not anticipated them being an addition to what producers would get.

And, again, it comes as a surprise to me, then again, in thinking it over, it makes a certain amount of sense. That is, these are capped at fairly tight numbers. It's not like anyone's going to be profiteering out of this.

Further, it simplifies the administration of it considerably. You don't really have to worry who's double-dipping. And it does put out those incentives that I think the Legislature wanted all along, which is to develop the market and get people looking towards that customer market rather than to the old administered market that is sunseting. We have no choice about that. If we want to develop things for the future, we've got to look towards these new customer markets.

So I wish you well with the rest of the day and thank you.

COMMISSIONER MOORE: Thank you, Mr. Kirshner.

Peter Miller from NRDC.

MR. P. MILLER: Good morning. And thanks for the opportunity to speak once again before you. I'll be brief in my echoing the compliments that have been already given to the Committee and to the Staff, and just say that I think this is excellent work and representative of the best work that the CEC has done over its 20-year history.

I think that -- I don't have any of our own issues, and I think that's also indicative of the easier job that the environmental community has had in evaluating this issue. We're not here asking for money. Our businesses aren't on the line here, and that's made it easier for us to come before you. It's tough when your business is on the line, and that's not the case for us.

So in looking at the Report and in hearing the comments that have been made so far and that I've heard before today, I think that there are some valuable suggestions to be made. I'll just mention a couple. I think that there are valid concerns about how the consumer rebates will be allocated. I think that that's worth paying attention to.

I think that there are some very valid concerns about the specific tiers for existing, whether the appropriate industry groups are in the appropriate tiers and how specific criteria might help to alleviate some concerns there, some valid concerns. I think it's clear that the emerging category has been reduced substantially from what it was in the previous draft. And we earlier argued for a small reduction, to 15 percent. You've gone beyond that. I can't offer a suggestion of where to take money if you increase that back up to 15 percent, so I'm not going to argue for it. It's been so far a struggle to make sure that we're not going to continue to squabble. And I think it's worth saying we're going to do more than that. We're going to really accomplish

something that's very positive and to hold that up as a model both in the state and outside of the state.

That's really all I have to offer today, other than my best wishes and good luck for finishing this up.

COMMISSIONER MOORE: Eric --

COMMISSIONER SHARPLESS: To your last point, Peter, are you suggesting more work in the Report that provides some standards of accomplishments that might be created as a result of the funding so that in four years from now we'll see if we hit the target?

MR. P. MILLER: I think that's a lot to ask for.

COMMISSIONER SHARPLESS: Yes, it is.

MR. P. MILLER: And I think that that's --

COMMISSIONER SHARPLESS: In 48 hours.

MR. P. MILLER: In 48 hours.

I don't have any standards to offer. I think that that would be a very valuable addition to the Report and something that would give the Commission and the industry and the environmental community a lot to try and strive for.

Short of that I think it would be useful to lay out some -- just the sense of what could be accomplished with this. Numbers are hard to come by. There's a lot of uncertainty, particularly when you're relying on market mechanisms. But I think that would be valuable in presenting this as a very positive effort and not just dividing up a very limited pie.

And I think that that's been clearly the goal of the Commission. It's been the goal of the environmental community. And I think that the way the Report and the proposal that's laid out now, that that's what's going to be accomplished. I have a lot of hope coming out of this last Draft.

COMMISSIONER MOORE: Thank you very much.
Eric Miller.

MR. E. MILLER: Thank you very much. Eric Miller,
Chief Executive Officer, Foresight Energy Company.

I would just like to, as others have, commend the latest Draft and express our support for it. And we believe that you've done an excellent job. And, I think, in a couple of areas, we would like to emphasize points of agreement that we have.

The first is we continue to support the customer incentive payments. Obviously, as I think everyone would love to see their categories larger, but I think you've done a good job there. And I think it's something we can live with. And as I think you'll hear from Working Assets, I think there's some strong interest on the consumer base and I don't think there's going to be any problem with those funds being quite adequately utilized. And, in fact, we're not at all worried that those funds are going to be utilized.

On the incentive mechanism, we continue to support the mechanism as proposed in the Draft. We have heard and are sympathetic to the concerns that have been raised about needing to have a fixed allocation. And, in fact, our original proposal that in some ways was a part of this whole process starting, was for a first-come, first-served allocation.

But as we've thought about it and as we've had a chance to review the good work of the Commission, I continue to believe

that that mechanism is a more orderly one and will certainly be viable for parties who are committed to a long-term, sustainable green market.

And I have some concerns that first-come, first-served or early fixed allocations, while they do help a lot in certainty, which is a good thing, may actually create an incentive for people to -- possibly a gold-rush sort of mentality, that come in and get them while they're good. And maybe people who won't have the long-term commitment may come who wouldn't come if they knew that they were only going to get what they could earn out of the marketplace in the long-term.

So for that reason, while it certainly introduces difficulty and risks on the supply side, in terms of structuring the contracts, and we're aware of and sympathetic to those, I think on balance we believe those are workable. And the benefits of having an orderly and straightforward process -- allocation process -- outweigh those concerns, in our view.

I would also like to support and was very pleased with the reconfiguration on the new side and the way you've structured it. It's going to provide a great deal of assistance to us in being able to put together incremental renewable projects.

We believe the package of incentives and the support for new projects and what we can do in the marketplace, that we can actually generate some real new projects happening. And that was a little more difficult to see before, and this Draft makes that a much more viable concept. And we're quite excited about that. We think we can really do some significant things with what you've got. So we're done.

COMMISSIONER SHARPLESS: You're supporting the production incentive for new?

MR. E. MILLER: Right, the bid -- yes. And the

collapsing of the categories and the general -- my sense is it expands the opportunities for cost competitive new renewables to get into the marketplace of whatever technology. And we see that as a positive step.

COMMISSIONER SHARPLESS: So is your greater emphasis on the collapsing of the categories versus the production incentive?

MR. E. MILLER: Yes.

COMMISSIONER MOORE: Thank you, Mr. Miller.

MR. E. MILLER: Thank you very much.

COMMISSIONER MOORE: We appreciate your comments.
Dan Whitney from SMUD.

MR. WHITNEY: Good morning. I'm here as Dan Whitney representing Jan Schori, our General Manager, who has sent to you a letter with comments regarding the allocation of these funds with specific application toward the emerging renewable category, and specifically therein photovoltaic.

COMMISSIONER MOORE: I don't know that we have that letter, so we'll be looking for it.

MR. WHITNEY: It's in -- I hope it's not on that cart, but it's --

[Laughter.]

COMMISSIONER MOORE: Yes, I hate to tell you what's going to happen to the cart, --

[Laughter.]

COMMISSIONER MOORE: -- but Jan is signing a return letter

to everyone who wrote us on that. She'll be up all night.

MR. MASRI: When was that submitted?

MR. WHITNEY: On the 21st.

COMMISSIONER MOORE: We'll look for it.

MR. WHITNEY: And we'll make sure it gets in there.

Importantly within that letter, though, we identify several things that I think should be of consideration to the Committee.

SMUD has focused its program on the sustained orderly development of photovoltaics. And to that end, we are committing 3.7 percent of our revenues to the public good. That is a considerably larger amount than required by AB 1890, but it represents what we think is an essential minimum level in order to provide a program that's going to meet the objectives needed in our community.

What we are trying to do is to transition photovoltaic into the competitive marketplace. And that market is uniquely available to the photovoltaics because we can actually bring it in at the distribution level at the retail customer. And you get considerably stronger benefits if you do that. And, with that in mind, we are putting a considerable amount of our resources into that. In fact, if you look at our whole Public Goods Program, over 30 percent of our resource available is going into this one application.

We recommend that, in an earlier submittal to you, that the 20-percent allocation requested of AB 1890 funds that would be for the photovoltaic program would really be the minimum necessary to give a comparable program that would demonstrate sustainability to the photovoltaic industry and bring those benefits to all the ratepayers in California.

With that in mind, our experience needs to be considered as well. And we think that a multi-year allocation of resources is what it does take. And SMUD is moving itself in that way to do that very thing by establishing here in the local area manufacturing capability for photovoltaics, that those manufacturers would come here simply because there is that market demonstrated by our commitment of this fund and also the use of photovoltaics in our service area.

Now we recognize the problem that you've got in allocating all of these funds. And it's exactly the same problem that we at SMUD have had. And we've had to ask the same kinds of questions. Certainly we do not have some of the constraints that are built into 1890 in terms of how -- you have some requirements you have to meet there as well.

But we have had to deal with these same issues in terms of prioritizing and selecting only those renewable resources that we think we can effectively transition into the marketplace where they will be competitive. And certainly I think from my comments you should recognize that we have committed ourselves to this photovoltaic program.

I should also comment it is probably not appropriate for SMUD to try to tell you how to allocate the balance of your funds because of the different requirements that our two organizations have. But we do believe that, by our example and the commitment that we are making, that you must have a viable program.

In order to have such a viable program, you have to have the sustainability factor. And in order to have that you have to have the long-term commitment of adequate resources.

If the entire State of California were to put the same

level of resources into the Photovoltaic Transitioning Program that SMUD is putting in, we would have something like \$250 million a year available for the sole purpose of moving PV forward.

Thank you.

COMMISSIONER MOORE: Thank you, sir.

MR. ALVAREZ: Mr. Whitney, just one question. The 30 percent that you allocated from your 3.7-percent Public Good charge, how much does that translate into dollars?

MR. WHITNEY: It's in the 5- to \$7-million-a-year range.

MR. ALVAREZ: Okay. Thank you.

COMMISSIONER MOORE: Thank you, sir.
Robin Walther.

MS. WALTHER: Good morning. I'm representing Southern California Edison. And I think I'd echo the compliments that other people have given to the Report.

Our written comments address several different issues. I just want to highlight a couple of them because they really did not get into this current Draft.

The first issue concerns the funding question. And the Report is written as if there's going to be \$540 million for sure there in this fund and the allocation is based on that 540. We really believe that the legislation reads that there's \$465 million and then up to 75 million. And the up-to-75-million really is going to depend on the extent to which it can be collected either during the four-year period or the three-month extension period.

We also made comments, and I'm not going to reiterate them here, on the implications this will have on contract restructuring. But we heard and read the Report and we are not objecting to the recommendation that the money go to QFs who are under existing contracts.

We again have reiterated a point that we have made before regarding the fact that we don't believe there's a need for incentives or subsidies for microcogen. We think it just would continue uneconomic bypass.

The area I want to address in a little more detail is an area that was not addressed in the previous report on energy content labeling. And we fully agree with the statements in the Report that customers should have access to information to allow them to make informed choices about electricity purchases.

And we also think that, for the implementation of Section 365 of AB 1890, that customers need to know and they need to be able to demonstrate how much of their energy is being purchased from renewables.

But having said that, we are recommending that we begin with a voluntary energy content labeling program. And by that I mean not every renewable, every retail provider needs to label their energy. But if they want their energy to be considered to be renewable, then they do need to follow a certain set of criteria for labeling it.

But we're particularly concerned that if there is any effort to incorporate emissions or other environmental factors, that be given careful consideration. We're considered about adding NOx that's located -- from the basin with NOx located in Wyoming or some other place, and just adding them together. And we don't think that that would be particularly useful information

to a customer. It would be incomplete and misleading.

And we think that incorporated emissions into a label or other environmental factors is going to take a significant amount of time and effort and should not be recommended. We don't recommend doing it at this point. And that completes our comments.

Thank you.

COMMISSIONER MOORE: Jan.

COMMISSIONER SHARPLESS: I have a question on your labeling issue. I understand DOE has been in the process of trying to put some type of labeling together.

MS. WALTHER: Right.

COMMISSIONER SHARPLESS: And this seems like a rather lengthy process, so I don't know that we've gotten very far on this. But to your point on air quality emissions, I don't think I really understand your point.

You don't want people to recognize that, if they get renewables in Colorado that, in fact, they might be reducing NOx emissions?

MS. WALTHER: No, no. I was -- they may be reducing NOx emissions, but my understanding of the labeling, and I've done some talking to people who have advocated this approach at the federal level, is that they're proposing that each provider would list the amount of emissions that their energy results in.

So that when you bought energy, if you were buying, let's say, -- someone would tell you it has so many tons of NOx and so much CO2 associated with it, et cetera. And I was concerned that particularly for energy that gets sold into the PX, that someone might take all the NOx associated with all the energy sources that

are being sold into the PX and then they would just add them up. And so that a customer wouldn't know where the NOx that it was responsible for was coming from or it was buying.

I wasn't even thinking of the situation you're talking about, that a customer needs to know what they're displacing. I didn't think that was going to be necessarily feasible

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COMMISSIONER SHARPLESS: Oh, besides that's not what I'm suggesting.

MS. WALTHER: Okay.

COMMISSIONER SHARPLESS: Because obviously air pollution knows no boundaries.

MS. WALTHER: Right, right.

COMMISSIONER SHARPLESS: But I see that the point you're making is a much more complex point. And I guess it will take a little bit more reading to understand precisely what all the complexities are.

MS. WALTHER: I can tell you that when I talked to one of the people who's been advocating this, he basically told me, "Well, that would add a complexity that we can't deal with," but of course having lived through the BRPU experience here at the Commission, I'm particularly concerned about -- and at the CPUC -- valuing a ton of NOx in Wyoming the same way we value a ton of NOx in the LA Basin.

COMMISSIONER SHARPLESS: Well, what would you precisely suggest the Committee put in the Report? We have a section that talks about labeling.

MS. WALTHER: Right.

COMMISSIONER SHARPLESS: But we don't make any strong recommendations. We don't suggest a voluntary program. What would you be suggesting?

MS. WALTHER: I think I would be suggesting that you at least -- there's a phrase in that section which deals with emissions. And I think that that phrase should be qualified to say that that shouldn't happen, that is going to require significant effort.

Right now the emphasis is on sources of energy, whether it's renewable or what kind of technology is used to produce the electricity. And I don't have any objections to that at this point. But I do have concerns about the sort of -- it's a phrase that suggests, well, we can also add emissions and add other environmental factors. And I think that there may be a need for a footnote or a qualification that that would take -- that's not something that could be done immediately.

COMMISSIONER SHARPLESS: Actually I think that's what it says.

MS. WALTHER: Okay. Well, I have to look at it more.

COMMISSIONER SHARPLESS: Okay. Thank you.

MS. WALTHER: It did raise concerns with us.

COMMISSIONER SHARPLESS: Thank you.

COMMISSIONER MOORE: Thank you very much.
Kathy Treleven.

MS. TRELEVEN: I am Kathy Treleven representing PG&E.

And I would like to join with, I guess, just about everybody here to congratulate the Committee on a really very good Report. It seems to us to meet the spirit of AB 1890, both in following the guidelines that the Legislature gave you and, more importantly, in balancing the concerns of a very diverse group of people with relatively simple and pragmatic mechanisms.

I'd echo Dan's thought that I think this can make it through the Legislature. And, in addition, I think it will be an important resource in the federal legislative discussions of what we need to do with renewables in the electric industry, restructured industry.

There are three specific new things in the Report PG&E would like to specifically add our support to. The sliding target cap seems to us to meet the needs of existing QF renewables while -- and give them support in proportion to need while meeting the target of moving toward an open market.

Second, the larger component for new renewables, we hope will lead to expanded new generation of renewables in California. And we think that the explicit prohibition on remaining in an existing QF contract while seeking these new dollars is an important distinction that will also increase the amount of truly new generation.

Third, the open bid structure for new generation seems to augment the amount of kilowatt hours we'll get that are market-ready generation.

We have a number of more minor comments in our small document today, and they basically touch on some of the emissions labeling concerns and the accounting concerns that Robin Walther raised beforehand.

Thanks very much.

COMMISSIONER MOORE: Thank you very much. Appreciate it.

Jack Monger.

MR. MONGER: Good morning and thank you for this opportunity to speak to you this morning and make what will be very brief comments.

First off, I'm representing Cannon Power Corporation. We are a San Diego company in the wind energy business. And our comments this morning really are directed at what is a very, very small part of this whole document, one percent to be exact. And that is the consumer information and market-building component that, for your information, is on page 32.

But we felt so compelled to make a couple of comments on this section because, even though it may be very small, if you're a sailor, you know that a one-degree course change now can make a very, very big difference on down the road. And we felt that a couple of fine-tuning things could be added to this section that would be very important.

We acknowledge, first off, exactly that the conclusion that the Commission has in this document. And that is that the future of the renewable energy business is very much going to be affected by the ability to develop a market in the years ahead. No question about it.

However, our problem comes in, I guess, some of it in the tone that is set in this section, specifically in the second paragraph where it says that "The burden for educating the public about renewable energy... cannot rest solely with" the "... marketers," and I assume that means all of those interests in renewable energy.

Well, we don't look at educating a public and creating a market as a burden. We look at it as a fact of life, as a necessity. I don't think other major advertisers or product manufacturers in this country would, in any way, consider developing a market as a burden.

I mean Budweiser certainly doesn't look at it that way and nor does any other, Coca-Cola or any other major manufacturer. It's just part of the business.

But yet they accept very, very serious responsibility for that task. And therein lies the very point I would like to make this morning. And that is that the renewable energy industry needs to be a part of the development of that information and that marketing approach. And my concern in this was the fact that what is proposed -- I guess my concern is not what is proposed, it's the detail that I would like to see added to this. The fact that what is being proposed is a renewable energy information clearinghouse.

We feel that it's going to take a lot more than just an information clearinghouse to really communicate to the people of California how important this is to their future and to really develop that market and have it be sufficient in four years' time to stand on its own.

So I guess what I would recommend or ask to recommend for your consideration is that the structure of this clearinghouse, or whatever component, whatever you're going to call it, include the stakeholders, the people who have, the companies that have, the interests that have so much to gain by this.

And certainly they are the companies involved in the marketing or production of this power. They are also the people of California who have often or many times made the case that

clean, renewable energy is important to our future.

That's what I believe needs to be the makeup of this group. And since it really, we believe, is going to have a huge impact on our company's performance and existence in four years' time, we feel that it is so important now to make this small change, this small inclusion to ask for a little bit more detail in the structuring of this clearinghouse to be specified that those interests that will very much contribute to the success of the program be allowed to participate in a very, very significant way.

Certainly in this business, we have the most to gain by the success of the program. We have the most to lose by the failure of the program. And so it is very much in our own interest to make every dollar count.

I think we're so fortunate in the foresight, that the funding has been set aside to help develop this market. And so it is very much in our interest to make sure that every dollar go as far as it possibly can towards the development of that market.

Thank you very much.

COMMISSIONER MOORE: Thank you very much.

Tom Hinrichs.

MR. HINRICHS: I'm Tom Hinrichs representing the Geothermal Energy Association. And I have handed you the copy of the draft that I will be filing today and is outside for those that are interested.

I have just two or three specific issues that are very important to the geothermal industry that I'd like to amplify. We certainly are very much a part of the comments that Bill Carlson

made. And those five issues are very important to us.

Just a little background in the context of these comments that I make. When the renewable industry developed their proposal, the geothermal industry had the bulk of the folks that are developers that are interested in pursuing in the development of new projects. And in our initial 27 percent that we in the renewable industry agreed to, we had allocated 22 percent to new and five percent to existing.

The concept that we in the Geothermal Energy Association, the people that I represent, had with that existing was that if a project desired help out of the existing fund for an existing project, they would then be not eligible for taking that particular geothermal resource and applying for new money for new projects to put somewhat of a limitation on the amount of existing projects that would apply.

With the change in the program, where the new is now on a totally competitive basis, there is a glitch here, that the existing projects then -- is there anything to limit all of the existing projects for applying for the five-percent money, and it would appear there isn't. And that would -- if that occurs, that will have a very minimal pittance available for existing projects.

The institutional investors in the geothermal industry have a filing that addresses this, and will carry that one further. I just want to point out, however, that in their filing, and I had hoped that maybe Bill Short would be up here before I am but I don't think you're going to provide the ability for commenting upon --

COMMISSIONER MOORE: He's next.

MR. HINRICHS: All right. Well, let me just indicate then that, as he discusses his application, they identify four

specific projects that they would like the money limited to. And he has a statement here, "The Geothermal Energy Association agrees that geothermal projects not identified do not need assistance." That is not a true statement. I am not supporting, as the Geothermal Energy, those specifically four projects.

The concept of limitation of the existing funds, I do. But I cannot speak for the developers as to the specific projects that should be -- the money limited to.

Let me speak quickly to two aspects associated with new.

In your page 10 definition and discussions of the in-state requirement, you make the statement that a project that is located in California and supplies power outside the State of California is not eligible for AB 1890 funds.

We have a potential project in Northern California that there would be a possible contract for sale of power into Oregon and Washington with the Bonneville Power Authority. And the benefits of that sale of power would really come to the State of California: The property taxes, the royalties on a federal project come actually right back to this Commission. And I don't see anything in AB 1890 that limits an in-state project to selling just within state.

Yes, ma'am.

COMMISSIONER SHARPLESS: I don't know that our Report does either.

MR. HINRICHS: On page 10 it says that.

COMMISSIONER SHARPLESS: The question is: Is the facility within California? Is the geothermal facility, all of it, that which produces power within the State of California?

MR. HINRICHS: The particular example I'm talking of, that is the case, but the sale of power could go outside the state. And if you notice on page 10 in the Report it states that that would not be able to take AB 1890.

We have another instance with the Oxbow Power Corporation that will be spoken to here by Mr. Greenwald that is the opposite situation, where their project is outside the State of California but they have facilities within the State of California. And he will address that. But that's just a specific earmark that I wanted to point out, that I don't think was the intent of the legislation.

COMMISSIONER SHARPLESS: This excludes two things: Out of state and municipal utilities.

MR. HINRICHS: Yes.

COMMISSIONER SHARPLESS: Are you taking issue with municipal utilities as well?

MR. HINRICHS: I don't see anything in the legislation that would require a lack of funding for a project that sold to municipal utilities.

I think the purpose of this is to develop new -- renewable resources within the State of California and, regardless of who it's sold to, that those benefits would come.

Let me quickly address the other issue, and it basically supports this concept that we are going, basically geothermal, primarily into the new category.

And I have, on the last page of my testimony, suggested and actually changed to the definition of a new resource to

accommodate those things of incremental additions that existing plants that would sell into the market no longer with the existing contract, even though the existing plant that there's now is selling on a contract. And then the additional enhancement of resources that would provide power to go into the market that was not under the contract would fit in that category, too.

So this somewhat implements what Bill indicated from the new side and is some specific words that I would appreciate you looking at from the standpoint of new resources.

COMMISSIONER SHARPLESS: Tom, I'm sorry. I missed your point. Could you just repeat that, but be specific?

MR. HINRICHS: Specifically, in the geothermal industry -- and this may apply to some others -- we may have an existing plant there that is operating under a Standard Offer No. 4 contract that has the ability to expand.

COMMISSIONER SHARPLESS: Right.

MR. HINRICHS: And what I'm saying is that expansion may not be like a repower, where you tear everything down, build it up and you've got 80 percent new funds going into it. But it is a new turbine generator that generates new electricity and may utilize some of the existing piping and auxiliaries that doesn't sell to the existing standard contract.

COMMISSIONER SHARPLESS: In other words, you would consider this surplus beyond the contract?

MR. HINRICHS: Surplus beyond the contract and additional capacity be put in.

COMMISSIONER SHARPLESS: So what's your point, though? Do you see our Report doing what, and what would you like

to see changed?

MR. HINRICHS: I would like the definition of new facilities to include expansions of existing plants and enhancement of existing resources that result in the sales into the new market that are not under existing utility contracts. And that's the specific words I have in there, Jan.

COMMISSIONER MOORE: Mr. Hinrichs, you're raising an issue that really does bring us into the world of the interstate compact that exists currently and what the FERC is likely to do with regional regulation, selling in and out of the greater region.

And do you see a need to define our definitions any further as far as plants that create energy here that sell outside the state boundaries and/or purchase power from outside our state boundaries?

MR. HINRICHS: I haven't -- maybe I better let Mr. Greenwald participate in that one more. I see a specific geothermal project that is within the state --

COMMISSIONER MOORE: Yes.

MR. HINRICHS: -- that may have some sales to it. It may not be all. There may be some sales out of state, some in, that could possibly be kept from qualifying for AB 1890 funding. And I wanted to point that out.

And if a new project chooses to just sell into the pool or to the PX, there is really no knowledge of exactly where that power goes.

COMMISSIONER MOORE: Okay. Well, we've been looking, and I'll look in your remarks. I don't see the reference right off the top.

MR. HINRICHS: Okay.

COMMISSIONER MOORE: But I will look for it. Thank you.

We'll go then -- Mr. Short is representing the Institutional Investors.

Mr. Short.

Do we not already have your submittal?

MR. SHORT: If you don't,...

COMMISSIONER MOORE: And you're going to name the four firms that ought to survive today?

MR. SHORT: Yes.

COMMISSIONER MOORE: I understand why Mr. Hinrichs might have been reluctant to do that.

[Mr. Short distributes written testimony to Committee.]

MR. SHORT: Ric Abel will actually be initially speaking for us.

MR. ABEL: The three institutions that I'm speaking on behalf of is Prudential, Signa and Deutsche Bank. We jointly have invested \$650 million in geothermal renewable energy projects in the State of California. In all of the renewable projects we have invested more than \$2 billion. And we consider ourselves to be a stakeholder and would like to be considered.

When the coalition has put forth their comments and ideas, that represents the developer in the majority of these projects. And the lenders were not consulted in a lot of those comments that went forth.

I would also like to restate what a lot of the people before me have. I think this is a very comprehensive Report and does very good justice overall.

I would like to make three main comments to the treatment of Tier III projects. And it is my feeling that the Tier III is underfunded, that there are too many projects included in Tier III and that the level of support at a 2.5-cent SRACs level is too low.

To the issue of it being underfunded, it is our belief that the consumer incentives are overfunded, given the lack of credible existing generation resources. And therefore we propose taking four percent of the allocation from consumer incentives and shifting it to Tier III.

The second point, that there are too many projects included in the Tier III Category, we would propose that the majority of the geothermal projects be eliminated from this category.

In meeting with various members of the Staff, it has been made clear to us that the GEA has represented that the geothermal industry existing projects do not need support.

It is our belief that there are a minimum of four projects that do need transition support. And we've identified those four projects.

We have arrived at the conclusion that since it's been represented to you and it's your understanding that the geothermal energy existing projects don't need support that therefore the GEA would be in support of the rest of the projects not being included.

If the GEA would like to submit another way of looking at this, or that that's not a true statement, I stand corrected and apologize for any misrepresentation.

The third category is that we would request that the support level of 2.5 cents be raised to 3 cents. For the projects that need transition support, the level of 2.5 cents is not sufficient.

We also believe that in raising the level it is not hurting anybody. There is a cap of funds that can go to the Tier III projects. And if the market were to cooperate and set an SRACs level at 2.5 cents, it would be our hope that the limited funds that have been allocated to Tier III projects could still be accessed by those projects. And if the support level was set more at a 3 or 3.5-cent level, it would allow for this.

Moving back to the idea of reducing the number of projects in the Tier III category, we are not opposed to having to prove need. We just were concerned about the administrative burden that that would create. And we're trying to simplify the concept and more clearly identify the projects in the geothermal industry of existing projects that would very much benefit from transition support.

It is our feeling that some of these projects are at risk, that they may cease to operate if they don't receive the requested level of support.

And with that I would like to open to any questions that you might have for anything else that I might be able to qualify.

COMMISSIONER MOORE: No. Mr. Abel, I'm curious. All of us can see why you would be concerned over levels of support, especially when you've got funding on the line, but the curious relationship as far as identifying what facilities ought to be supported and I'm wondering whether or not you've spoken to anyone who wasn't on your support list to find out how they felt about being excluded?

MR. ABEL: We have spoken to the other players and asked them to participate and asked them to clarify whether they have needed support, and nobody else has stepped forward.

And in my dialogue with members of the Staff, it has been represented to me that it is their understanding, prior to our getting involved in the process, that none of the projects of the geothermal projects needed support.

And so we have done a best-efforts to try to contact everybody and elicit their support. They feel that they -- what has been represented to me is that they've been adequately represented.

But, here again, if there is a preference to have a needs test or something, we're in support of that. It's just our concern was is that would create a very large administrative burden on the CEC.

And in an effort to put forth an idea that would limit that burden, we've tried to identify some specific projects that we feel need some transition support.

COMMISSIONER MOORE: You can understand the question mark on our part. To the best of my knowledge, the banks don't generally sit on the boards of directors of the individual concerns either in the wind category, in the biomass category.

And, as a consequence, the appearance of a united front of banks in one industry here to support a change in allocation

could at least topically be construed as a support for an investment, your own investment, as opposed to the concern over energy provision within the state or efficient allocation according to the Bill.

So I'm just trying to tease apart where the relationship would take us, what actions we ought to take. And my job is really not -- I don't want to sound too harsh about this -- my job is not to protect your bank, because I assume you make rational decisions when you loan money. And, when you do, you depend on an industry or a company and its management as they present themselves to you, or their balance sheets, and you lend on that basis as opposed to adjusting a state allocation mechanism in order to support an institutional investment.

You can understand the dilemma that I face in trying to listen to you and be sympathetic, but at the same time address the concerns of the Bill without worrying overly much about your investors, if you will.

MR. ABEL: Absolutely, Mr. Moore. You know, all of our institutions analyze these deals up front. We invested them. And some of our assumptions proved wrong. And to the extent we lose some money, that is certainly our hardship.

I come to you with the concept of trying to continue to have these projects operated. To me the consideration is not whether the financial institutions are going to benefit from this, but more that the State of California have an opportunity to most cost-effectively get renewable power produced in the State of California.

And to me for the very limited amount of funds that are being requested to keep these projects operating, because they're smaller and have a little bit higher operating cost level, is to me, in my estimation, dollars well spent in terms of maximizing the renewable energy that is produced in the State of California per dollar, AB 1890 dollar spent.

All of the dollars that we're requested pale in comparison to the amount of dollars that's necessary to develop and create the similar amount of generation from, say, new project

development.

These are very limited and small sums of money in order to keep existing projects that have operated at very high capacity factors and produced a lot of renewable energy for the State of California. And our goal is to keep those projects operating, and feel that there is going to be some very difficult times.

The other point that I would make in responding to your comments, Mr. Moore, is that in all of these investments, the debt is worth much less than 100 cents on the dollar. So effectively the debt does not have a control of equity as in sort of moving the project forward. But from a capitalization point of view that's remaining, we, in essence, by default have become the equity investors going forward. Because of the mechanisms of the cliff, the existing equity is not motivated to address the transitions that need to be taking place in order to make these projects so they can operate post-cliff. Because pre-cliff they are benefitting from the higher cost of energy that will not be there post-cliff.

COMMISSIONER SHARPLESS: If I could, I think I'm going along the lines of Commissioner Moore here. And it seems to me that the Committee has tried many different approaches to try to carry out the mandates in 1890.

We started out with some kind of elaborate, at least the concept was, an elaborate mechanism for determining projects that could survive after the four years and projects that were in need and those that were not in need. We talked about triage.

In each one of these approaches we ran into, as you've indicated, problems that would require huge amounts of administration to make corporate and bank-like decisions by a government agency. And we have moved way, way, way away from that, and we are at the point where we are.

I daresay that there are probably technologies, all the technologies in all of the tiers have similar issues to the ones that you raise for geothermal. And that's why we approached it from a market-based system in the existing category, because we felt that that was the fairest to all technologies.

Now in terms of the percentages in the tiers, we're open to listening to the arguments the parties have as to the impacts and the implications that might be raised by those and likewise some of the issues that you've raised about whether it should be 3 cents or 2.5 cents.

The bottom line, though, and one thing I don't see in your comments and I'd like to ask you to comment, is that in every case we have ramped down those cents-per-kilowatt hours in the later years. Your suggestion here seems to increase from 2.5 cents in Tier III to 3 for what, four years?

MR. ABEL: Yes, ma'am.

COMMISSIONER SHARPLESS: Constant?

MR. ABEL: Yes, ma'am.

And I believe that the Tier II projects are constant at 3.5 cents. It's only the Tier I that ramps down from a level of 5 cents downwards to a level of 3.5 cents. So even at the end of the fourth year, in terms of the level of support that's being requested, it's still a level that is lower than the other technologies.

COMMISSIONER SHARPLESS: I think I just get concerned about trying to go back again with some sort of "let's look at project by project and determine need," because if you do it for geothermal, why shouldn't you do it for every technology band?

MR. ABEL: You know, I guess there's different approaches. The way the allocation of funds was split up, there is an inordinate amount of generating generation actually produced in the Tier III category. So that when you do the mathematics and sort of look at what is the level of support, it's less than a mil that will go to the Tier III category.

So, in other words, I think there's an inconsistency in the amount of allocation of dollars that go to Tier III in reference to the amount of gigawatt hours that are produced. And so here again our approach was to try to work with the approach that the Staff and the Commission has taken and not try to change it more than is necessary.

But what's going to happen is, the way that it is here

now, the majority of the projects in Tier III do not need the assistance. And because of the dilution, the projects that do need the assistance will get very little.

I stand corrected that maybe our proposal to try to put something on the table that is very simplified has problems associated with it and maybe there is a better way to do it. But the main point that I think we're trying to make is there is a very large number of projects and a very large number of gigawatt hours being produced in the Tier III projects to such an extent that the amount of support per project is going to be very, very small dollars.

COMMISSIONER MOORE: Okay. We have two of your colleagues, Linda Zaininger.

MS. ZAININGER: Yes. Thank you. I'd only like to very briefly make a few comments. My name's Lydia Zaininger with Deutsche Bank in New York. And we are part of the group.

I appreciate the openness that we have here because it's very easy to be cynical about the intentions of a group of lenders.

However, I must come back to the point that Ric has made that we really do see ourselves not in a traditional lending role here necessarily because of the dramatic -- partly because of dramatic changes in the industry.

Back to Ric's point, also that our view is that there is insufficient support for certain of the Tier III projects. It really comes down to the core issue of -- I think very well seen on the pie charts on page 4, I believe of the Report -- which is the large discrepancy or difference between the actual capacity of some of these geothermals versus generated energy.

And I think that this consistent, reliable, renewable source of energy isn't getting -- doesn't appear through the Report to be getting the allocation that is fair for that consistent, historical level of generation. And that's what we've tried to address in the comments that we've submitted today.

COMMISSIONER MOORE: Thank you.

MR. ZAININGER: Thank you.

COMMISSIONER MOORE: Mr. Short.

MR. SHORT: Yes, just very briefly. This is Bill Short. I'm consultant to the Geothermal Institutional Investors Group.

I just want to add a point. Obviously we looked at Tier I, Tier II and Tier III needs, what were being served there.

With respect to the Tier 1 and Tier II, they are getting approximately on a per-kilowatt-hour basis per year approximately six times more need, and they are producing renewable energy just as we are. And ours actually works out, what was originally handed to us in the Report, to being less than basically a mil per year.

If you take that mil, obviously, and you allocate it to any of these projects in, let's say, the year 2001, it comes up to, even the largest geothermal projects, at 80 megawatts less than a million dollars. And on many of these projects it's only about 115- to 140,000. It won't have an impact at that level. It needs to be concentrated. It cannot be an entitlement program. It has to be somehow needs-tested.

Thank you.

COMMISSIONER MOORE: Thank you. We appreciate your comments very much.

MR. SHORT: Thank you.

COMMISSIONER MOORE: All right. Lon House.

[Mr. House distributes written testimony to the Committee.]

MR. HOUSE: Good morning. I'm Lon House with the Association of California Water Agencies. I've provided you with handouts. I want to talk briefly about one thing, and this is on page 33 of your Report.

And that is the requirement that the consumer creditors only go to contracts that are direct access contracts.

We have about a third of the small hydro capacity and about half the small hydrogeneration in the state. And recently we went out for about a thousand megawatts of contracts for 1998.

And we got it -- the response was very good. We got

electricity, about a penny and a half a kilowatt hour, which was competitive for us.

What was also included in that RFP was a request for other services. And this is something I wanted to bring up real quickly.

If you have a requirement for direct access, under direct access the customer that is involved in this has to basically make an all-or-nothing decision. If they decide they're going to go with direct access and going to go with a renewable provider, they have to find someone to do the nominations. They have to find someone to do the scheduling. They have to arrange for ancillary services. They have to arrange for paying for the imbalances and for metering and billing.

And included in my report is just a summary of the prices that we received as part of this RFP. Well, what this did for us is it forced us to sort of go back and said, "You know, this is a lot more complicated than what we're really interested in. What we really want to do is just contract with some of these low-cost electricity providers." So we are negotiating with them now for contract for differences.

And, as you're aware, the contract for differences is a generator and a consumer make some sort of an agreement with some sort of a price associated with. The consumer looks and remains the utility customer, and looks to the Power Exchange just like every other utility customer.

The Power Exchange is responsible for all the nominations -- or the utility's responsibility for all the nominations, all the scheduling, all the imbalances, everything.

The only difference is that at the end of the month, or whatever this period is, there's a true-up in the price between the contract price that the generator and the consumer have agreed to. And right now this is something that we're looking for.

I think that particularly for the intermittent renewables, the penalties associated with imbalances are very, very high, as you see in there, 20 cents a kilowatt hour. And it is going to force somebody to be in the market of making sure that

the generation and that the supply and the demand match perfectly throughout the day. And this is going to be very expensive, at least from our perspective.

So what I would like to recommend is that, if you're really interested in getting the renewables sold, you can broaden this category to have a contract for differences, so the renewables provider and the consumer still have a contract for a set price, but the consumer doesn't have all of the increased responsibility to arrange for or to pay someone to arrange for the nominations, the scheduling, all the ancillary services, all the metering, billing and all the imbalances. And this is just something that I would like for you to consider.

Thank you.

Do you have any questions?

COMMISSIONER MOORE: Appreciate your remarks. Thank you very much.

Mr. Ely, you'll be our last speaker before we break for lunch. And we'll ultimately be coming back at 1:15.

DR. ELY: My name is Richard Ely. I'm a small hydro power developer. Presently I hold two preliminary permits. In essence, I'm very much a new or potential generator.

I'd like just to bring two very narrow points to the Commission's attention. Under the definition of microcogeneration, I completely agree with SMUD. The environmental benefits of generating at the point of use is very important. And I completely disagree with Southern California Edison that that effect should be ignored.

I would like to have the Commission consider that the definition of cogeneration be defined and be expanded slightly to include over-the-fence or within-the-fence use of hydro power.

I come from New England, and in New England we have many old mills where hydro power is generated, in effect, in the basement or in the building out back. I have a couple of sites in mind in California. And it would be helpful if that was clarified or incorporated in the definition of microcogeneration.

Emerging technologies. When I first read this document,

when I first read AB 1890, when I saw the words "new technologies," I assumed it meant new technologies, meaning new technology, not old technology at new projects.

What seems to have happened here is that the entire idea of "new technology" has been usurped by existing technologies and is being used, in essence, as a funder, a funding mechanism for ongoing, well-established processes that we all know.

I don't think that's such a bad idea. But what I would not like to have dropped from the Commission's attention is that the underlying motivation in the original AB 1890 was to induce, create new technologies in the sense that you have now turned words into "emerging technologies."

And what's happened, as I read the document and I read the requirements for an "emerging technology," is that they are an emerging. That you require, in effect, a technology that has a 20-year life, that can give a five-year warranty, that has available data, has one-year demonstration at full potential.

Now I understand that one of the emphasizes of this is to fund photovoltaics, of which I have no objection since it's certainly the intent of the legislation. But by requiring all of the things that you have in that list of requirements, you've eliminated any new technologies in the sense that anyone outside of this room would mean those words.

I would like the Commission to consider that, in the process of evaluating the emerging technologies, that they use a more flexible standard than is required under the Items 2, 3, 4 and 5 of their requirements, which clearly eliminate, in my mind, any new and innovative technologies from consideration.

That's all I have to say. Thank you very much.

COMMISSIONER MOORE: Appreciate your comments.

We're in recess until 1:15. Thank you.

[Luncheon recess taken from 11:55 a.m. to 1:25 p.m.]

COMMISSIONER MOORE: Ladies and gentlemen, if you will rejoin us, we'll start the hearing again.

All right. We're going to move into the afternoon session. And I have a couple of people that have flights to catch

that I'm going to try and accommodate, but I'll ask you to keep your comments as brief and to the point as you can.

Jeff Sprecher.

MR. SPRECHER: Hi. I'm Jeff Sprecher with Western Power Group. And over the last two and a half years my company has been working to design and implement a computerized exchange for trading of products related to the electricity business.

And in that regard I rise to say that we very much support the Commission's decision recommendation on page 19 regarding the establishment of an exchange-based clearinghouse.

And while there are many details left to be worked out with regard to that implementation, we look forward to being part of the consortium that would contribute to solving the problems of implementation.

I wanted also to mention to you that we will work to support your recommendation in the WEPEX process to make sure that the independent system operator can be designed to ensure the ability to accommodate customer choice for renewable power and also to deliver that power.

And we will support the Commission's recommendation in the Legislature and look for ways to define funding mechanisms to establish and maintain an exchange that would be outside of the \$540 million of renewable funding that's being discussed here in principle today.

We know the Legislature is looking for the Commission's guidance, particularly in this area. And so we look forward to being part of the process; and wanted to thank you and your Staff producing a very, very thoughtful Report in this regard.

COMMISSIONER MOORE: Thank you very much.

Paul Wwebben.

MR. WWEBBEN: Yes. Good afternoon, Mr. Commissioner Moore and fellow Commissioners, my pleasure. My name is Paul Wwebben. I'm the Clean Fuels Officer with the South Coast Air Quality Management District, and I'm here representing Dr. Jim Lentz [phonetic], our Executive Officer, here today.

The District appreciates this opportunity to make

comments on the Committee's Report. This is an important milestone for the Commission, as it takes steps to give coherent structure and logic to the unprecedented restructuring of the utility market as directed by AB 1890.

The District is strongly supportive of the policies and recommendations being made today. These policies will have a direct and beneficial impact, in our view, on the development and commercialization of clean, renewable energy technologies, including fuel cells, which use renewable feed stocks.

In addition, the District would like to address four issues which relate to your recommendations.

The first, in addition to the recommendations before you, we believe that there will also be benefits associated with adopting criteria for exempting clean, *i.e.*, low emission and zero emission renewable energy production, from stranded cost payments, so-called CTCs.

The recent decline in renewable energy production in California has resulted in the loss of zero and near-zero emission electricity generating capacity, which has effectively been replaced with higher-emitting fossil production.

Conversely, fuel cell and cleaner energy technologies, such as roof-mounted PVs, et cetera, must grow significantly over the next decade in order to help the South Coast Air Basin attain the current federal air quality standards.

The United States EPA has also proposed more stringent air pollution standards for ozone and fine particulate. And, if adopted, these revised standards will create an even greater need to expedite the use of clean, renewable technologies.

So the CC could provide a clear market signal by establishing a policy goal that fuel cells and cleaner, renewable energy technologies be exempted from the Competitive Transition Charges over the next decade. This will attract significant additional investment in these technologies while also contributing statewide to the more efficient use of energy.

Our second point, the proposal before you today recommends that fuel cells should be treated as fuel switching for

purposes of being exempted from the CTC.

The District strongly supports this recommendation. The Commission may also want to consider making a finding that such exemption should be in place through the year 2010 in light of the severe nonattainment status of the South Coast Air Basin.

Third, there are also benefits associated with adopting explicit funding priorities for low and zero pollution energy production technologies which are as clean or cleaner than fuel cells.

The District has operated the first commercial fuel cell in the United States and has achieved over 32,000 operating hours since April 1992. These systems have now demonstrated reliability above 99 percent in commercial applications, such as the Hyatt Hotel and Kaiser Hospital in Southern California.

The Southern California Gas Company has recorded in effect 177,000 hours of operation just as of last year using those systems. So we think that it's now time to build on that success by ensuring a sustainable commercialization of fuel cell technology.

As Commissioner Rohy pointed out a recent fuel cell symposium held at the District, fuel cells can provide multiple system benefits. These benefits include reduced loads on long-distance transmission lines, accelerated service restoration and network islands during prolonged outages, such as those seen several times last year, and the provision of onsite, interruptible power.

By giving significant incentives for the deployment of fuel cells, California can retain and build on its leadership as the most energy efficient state in the Union.

Our fourth point I'd like to address involves the use of labeling and certification. Green technology certification labeling, based on emissions and sustainability of a technology, can significantly enhance the marketing, the full value of clean technologies. Clear, concise and meaningful information on the environmental impact of energy production needs to be provided as directly to the consumer as possible.

In the highly competitive energy market foreseen by AB 1890 there will be significant opportunities to market green quality of service to energy consumers, both at the wholesale and retail level. While clean, renewable technologies may have price premiums in certain market niches, such cost premiums may be offset by the ability of users to market themselves as an ultra clean business enterprise. In other words, green labeling can help enable a market for clean technologies which have higher costs but additional value to consumers.

Those added values include: Greater reliability, enhanced energy diversity, onsite flexibility and green corporate image building.

So the use of prominent labels and simple, consistent and rigorous criteria for ranking low-emission and zero-emission technologies is therefore a high priority at the onset of an open energy market.

The District would be pleased to work cooperatively with the Commission, Cal/EPA and all other organizations to develop and expedite the use of a uniform certification and labeling process.

So in conclusion the proposed policies being considered today will have a profound effect on the near-term commercial viability and long-term sustainability of clean, renewable energy technologies. Your policies will set the benchmark for national policy. They will also have a direct impact on the pace of energy technology innovation and thereby dictate to a large extent the rate of continued air quality progress in the South Coast Air Basin.

So the District commends the CEC for your diligence in your approach of this issue and certainly appreciate the opportunity and look forward to working with you. Thank you.

COMMISSIONER MOORE: Thank you very much. We'll look forward to the South Coast's support in the Legislature. Thank you very much.

Craig Anthony, Department of Forestry.

MR. ANTHONY: Good afternoon, Commissioners. My name's Craig Anthony. I'm Deputy Director for Resource Management with

the California Department of Forestry and Fire Protection.

I appreciate the opportunity to address you today on this very important issue. The Department has a strong interest in the future of the biomass industry in many areas. The obvious and most often discussed is the importance of the biomass industry as a receiving point for wildland, forest fuels to reduce fire danger.

Your Staff Reports have done an excellent job covering the fire angle. However, I'd like to expand the discussion to the importance of the biomass industry to California's forest health. Many factors have resulted in fuel accumulations in our forests and wildlands. They include passive cultural methods, tax restrictions prior to 1974 that often forced landowners to harvest heavier than they would have otherwise, and also the extended effect of drought in the State of California.

CDF has several strategies to address these issues. They include timber harvest regulatory reform and the Department's fire planning effort. The biomass industry represents an extremely important tool in addressing both fire and forest health challenges in California.

It is critical that the biomass industry survives utility restructuring efforts. While not qualified not to present alternatives on how subsidies or cost offsets could be used to guarantee the future of the biomass industry, I feel it's important to develop any subsidy based on public benefit.

These public benefits can include or do include environmental benefits such as air quality, water quality, fire hazard reduction, forest health issues and also forest and agricultural waste diversion from landfills.

Additional public benefit, of course, is the use of a domestic energy source versus imported fossil fuels.

And third is the economic development resulting from jobs in our local, rural and also our urban areas of the state.

Biomass subsidies should be weighed to yield the greatest public benefit. For example, the CDF fire planning effort has a GIS system that identifies 16 different asset values in our forest

lands. We classify these asset values as high, medium and low, thus normalizing the noneconomic and economic benefits.

The CDF GIS system is formatted to identify areas of high fuel accumulations, allowing the identification of areas as sources of biomass fuel yielding that results in high public benefits.

Finally, the Department cannot address the fuel accumulation crisis in the state on our over 40 million acres through our prescribed burning program that treats only 40- to 60,000 acres a year. The fuel accumulation problem in the State of California must be dealt with on a much larger scale. We must continue to provide landowners the tools to manage their land in an environmental sound method, and that biomass most certainly is a fundamental key to that.

I appreciate the opportunity to make comments to you today.

COMMISSIONER MOORE: Mr. Anthony, you're aware that there's been a dance around the issue of how to quantify and put a value of one kind or another on the benefits, for instance, from removing slash from the forest areas --

MR. ANTHONY: Yes.

COMMISSIONER MOORE: -- and that biomass that could pose a fire hazard. Can I assume that your Department is contributing to the Cal/EPA report on the basis of attempting to come to some of that quantification, to provide that?

MR. ANTHONY: You'll be receiving a letter from the Director probably tomorrow in your office.

COMMISSIONER MOORE: So you folks are taking that task on head-on?

MR. ANTHONY: Yes, sir.

COMMISSIONER MOORE: Thank you.

COMMISSIONER SHARPLESS: Could I just ask -- I'm just not aware -- a clarification question. What is your revenue source for fire prevention?

MR. ANTHONY: The fire protection revenue source for the Department is approximately \$300 million General Fund dollars.

COMMISSIONER SHARPLESS: So it all comes from General Fund?

MR. ANTHONY: That's correct.

COMMISSIONER SHARPLESS: Do you have any special funds that feed into forest protection or reforestation?

MR. ANTHONY: The regulatory side of the Department, the forest practice harvesting regulation is a special fund that is from receipts off primarily Jackson State Forest timber sales in Mendocino County.

COMMISSIONER SHARPLESS: Have those revenues been going up or down?

MR. ANTHONY: Those revenues had continued to rise over a period of time. And like many in the room probably understand the concept that when your revenue account seems to grow too large, that there's a way for it to be drained. And the government has figured out a way to drain our excess revenues, so --

COMMISSIONER MOORE: Still producing the same number of revenues, you're not capturing them in your own fund?

MR. ANTHONY: We're maintaining our basic program level and excess revenues find a higher and better use.

COMMISSIONER SHARPLESS: So you're saying you're --
[Laughter.]

COMMISSIONER SHARPLESS: So you're saying in budgetary terms that your special funds are fungible?

MR. ANTHONY: Correct.

COMMISSIONER SHARPLESS: Okay. Thank you.

COMMISSIONER MOORE: Thank you.
Mike Stern.

MR. STERN: Hi. My name is Mike Stern. I represent the "National Coalition for Honesty in the Renewable Energy Industry." I actually just made that up because --
[Laughter.]

MR. STERN: -- it seems like --

COMMISSIONER MOORE: We haven't had an oxymoron all morning, right?

MR. STERN: It seems like everybody else has a coalition of one sort or another.

Actually I don't have much to say other than the fact that because everyone seems to have something against your policy Report, I guess it means you're doing a good job because that really shows that you've managed to meld everyone's ideas and desires as close as you possibly can. And I applaud you for the effort like everyone else has.

My concern, my main focus is on emerging technologies. I want to make sure that no other attacks are made about the role of emerging technologies or the value of emerging technologies. And, like you said, you don't want to hear infomercials about it.

But since there was an earlier attempt to move money from emerging into new or existing, I'd just like to say I suggest moving five percent or 10 percent from new into emerging. That just should balance those two out nicely.

Also when it comes to emerging and specifically photovoltaics I am of the school that really believes in the importance of PV to the future of the state and the country as a whole. So I would encourage you to accelerate the PV portion of emerging and the emerging program in general ahead of the 1998 plan to start the process of determining how to spend those funds and how best to utilize the plan. I would encourage you to accelerate that up into this year, so that by 1998 a program for PV, whatever it turns out to be, is ready to hit the ground running.

COMMISSIONER MOORE: Thank you. Appreciate your comments.

Steven Greenwald on the Oxbow issue.

MR. GREENWALD: Thank you. Good afternoon. I am here on behalf of Oxbow Power Group. We did submit comments yesterday afternoon. And let me first say I guess the good news is I'm not going to ask you to reallocate any money from one fund to another.

The bad news is, and I think I'm the first person's who's going to tell you, that I've heard today, you have committed an egregious error. And the egregious error in my opinion is that it

creates tremendous injustice. And I'm talking about the definition that you have divined for in-state generation.

The definition is at the bottom of page 42 and goes over to the top of page 43. And what your definition has done is to almost purposely and singularly exclude a long, proud member of the California renewable community from participation in this program. And that is Oxbow Geothermal. And let me spend a little bit about what Oxbow Geothermal is and what it isn't.

What it is not, it's not a wind farm in Kansas; it's not a tire burner in Arizona, that have all of their qualifying facilities in that state and then bring their power into the State of California through utility-owned FERC-regulated transmission lines. That is not Oxbow Geothermal.

What Oxbow Geothermal is is an integrated facility with, yes, generation facilities in the state of Nevada, but a transmission line into the California. The critical fact is that the FERC has said all of those facilities are a qualifying facility under FERC's rules.

FERC has said, in effect, that the transmission facilities are an integral and necessary component of the renewable resource, the renewable resource project. FERC doesn't differentiate between generation transmission. You're a qualifying facility or you're not.

And, importantly, all the power on that transmission line is renewable resource power. There's no commingling as would be the case if you were on a utility common carrier line.

How do we get to the fact that your definition excludes Oxbow Geothermal? If you look at page 42 at the bottom, you start out and you say, "'In-state' is defined as physically located within the State of California." That doesn't create a problem.

You go over to the top of the next page and we have a sentence or part of a sentence, "in-state operation and development of existing and new and emerging renewable resource technologies." And from that group of words you glean three words: Operation of technologies. And from those three words, you come out and say those three words "would appear to indicate"

-- "would appear to indicate that" having generation facilities is an absolute -- is that the Legislature intended absolutely, definitively to make generation facilities within the state an absolute criteria. I don't think that's a fair reading. I don't think that's what the Legislature intended.

I understand where you're coming from. You're afraid we're going to open a Pandora's Box and we are going to let the Kansas wind farm or the Arizona tire burner in. And then your last sentence on the top of paragraph 43 [sic] suggests that.

You say if we open it up to anybody who bring power in the state with transmission lines, we're going to have this commingling. We're going to have renewable and nonrenewable power coming in. We're not going to be able to account for it. That's not a problem in this instance.

The only power that comes in on that transmission line is renewable resource power. And the FERC said in their order that if any power that's not renewable from that QF comes into the state, the world changes. That transmission line ceases to be a qualifying facility transmission line. It becomes a utility transmission line which must be regulated.

Besides the fact, in my opinion, you don't have support by the Legislature, and also I think your legitimate concerns, that is Pandora's Box, are not raised by Oxbow, I think are two very, very important facts here.

One, we pay taxes in the State of California because we are physically located here. I just have a hard time reconciling the fact that if the California taxing authorities say we are in-state in taxes for our property, that this Commission would say we're not.

But even more importantly, this Commission, this Commission, in my understanding, has always considered Oxbow Geothermal as part of the California renewable industry. And let me call your attention to Figure 1-1 and 1-2, which was addressed this morning. That says, and that's page 4, "California's In-State Renewable Capacity, 1996." To go back to the prior page, it explains. What this talks about is the history and status of

California's renewable industry.

The first sentence at the bottom of page 3 says, "Over the past decade and a half, California has developed the largest and most diverse renewable generation industry in the world." That's a correct statement. Oxbow Geothermal has been a part of that.

To go down to the last sentence in that page, it says, "Figures 1-1 and 1-2 show the... capacity... and generation... of the technologies comprising the California renewable power industry."

You go over to Figure 1-1, again at the title, "California In-State Renewable Capacity," it has a figure, QF Geothermal, 885 megawatts.

We asked your Staff yesterday, "Does that figure include Oxbow Geothermal?"

They came back. They said, "We think it does, but we need to confirm that." They came back and confirmed it. And I suggest to you that Staff's inclusion of Oxbow Geothermal in this chart as a true member of the California renewable industry was not an oversight. It wasn't some mistake. It is the way everybody in this state, this Commission, the PUC, the Legislature has always looked at this facility.

I think it'd be grossly unfair and inequitable for you now to say, after you have -- you have properly included us for all the good things we bring to California as part of California -- for now you to say, "You're no longer part of the California community."

Let me conclude by two quick points. One is that, in my opinion, FERC has exclusive jurisdiction as to whether or not what is a QF facility. FERC has decided we have QF facilities in California and in the state of Nevada. And I read the IEP case in the Ninth Circuit as saying you must defer to them.

But let me just say one thing. My first choice would be obviously that you accept, as we've proposed -- and no one has proposed -- the concept if FERC certifies you as having QF facilities in California that you are eligible, and just eligible,

not -- we just want to come in, have the opportunity to participate and show what we can do relative to everybody else.

But if you can't get there, you can't get there, I would urge you, at a minimum, to remove the portion where you say we're out and at least raise the question to the Legislature, and say, "What do we do? This one's a little bit different," so that when we go to the Legislature, we'll at least have an even-handed opportunity, as opposed to what you're now doing.

You're, in effect, telling the Legislature that you have made a decision to keep us out. And I would urge you at a minimum to at least go back to the Legislature with a question.

Thank you.

COMMISSIONER MOORE: Thank you, Mr. Greenwald.

And may I ask a favor of you? Would you fax over from your office before tomorrow a copy of the FERC order on the QF status --

MR. GREENWALD: Actually I --

COMMISSIONER MOORE: -- or if you have a copy now, would you drop it off with our Staff?

MR. GREENWALD: Yes, I have it.

COMMISSIONER MOORE: We were discussing that this morning and would like to see it. Thank you.

And at the risk of restating the obvious, I think the discomfiture that Mr. Greenwald suffered by having someone's cell phone go off, think about your social etiquette here. That's not very nice. So if you come in these chambers, would you please switch your phones to off or your pagers, et cetera. He, nor anyone else, deserves that sort of treatment. Thank you.

Marwan.

MR. MASRI: I have a quick question, Mr. Greenwald, if I may?

COMMISSIONER MOORE: Mr. Greenwald, please.

MR. GREENWALD: Yes.

MR. MASRI: Does Oxbow pay property tax on the plant to the California or only on the transmission line to California?

MR. GREENWALD: What Oxbow pays property taxes on are

those facilities physically located -- and I believe there are two California counties.

MR. MASRI: Not on the portion that's located in Nevada?

MR. GREENWALD: Property taxes are based on --

COMMISSIONER MOORE: On the physical plant?

COMMISSIONER SHARPLESS: On the property within the state.

MR. GREENWALD: That's correct.

My understanding is that we do pay an incrementally more portion of income taxes to the State of California because the State of California recognizes that the industry that owns the generating facility has some physical facilities within the state. So that that's -- you get an income tax, a slight income tax component also. But the main thing is property taxes, yes.

COMMISSIONER SHARPLESS: Do you know if there are -- I don't know why you would, but I'll ask the question in case you do -- do you know if there are any other facilities in the same situation as you?

MR. GREENWALD: To the best of my knowledge, there are none. And you will see, when you read the FERC decision, it goes back five or six years, it was not a clean-cut decision. The FERC grappled with it as to what to do with this facility, which suggests to you that it's a very unique situation. So I think that we're not opening Pandora's Box.

I know no one here, my understanding is, in this proceeding has come forward and said they fit our situation.

I also -- the other thing is the real people, the people who we'd be competing with for funds, none of them have come forward, it is my understanding, and say, "Oxbow, you shouldn't be allowed to participate because you're taking" -- "there will be you and others coming in behind you."

So I mean I can't tell you a hundred percent, but my best and informed judgment is that there is no one else in our situation.

And let me say one other thing. We have two geothermal

facilities in Nevada, one which is more traditional situation. That is, it does not have transmission lines as part of the geothermal facility. We are not asking for that to be included. We think that's a different situation. We think what makes this truly a California facility is the fact that FERC has said it is part of the renewable resource. You can't have the renewable resource without the transmission lines taking it to the customer.

COMMISSIONER MOORE: Thank you.

MR. GREENWALD: Thank you.

COMMISSIONER MOORE: Appreciate it very much.
Ken Wiseman.

MR. WISEMAN: I'm Ken Wiseman, representing Consumer's Utility Advisors. As you may recall, we're located in the Southern San Joaquin Valley and have become involved in this process to keep viable the option of burning ag wastes in a biomass facility as opposed to current open field burning practices.

Our concept has been that if growers cooperate together, they can become both a generator of biomass energy and a direct access consumer. We are very pleased with the flexibility that we see in your Draft, as the economics of our proposal will be best served by being able to choose between either the Existing Technologies or New Technologies Accounts as well as being able to participate in the Customer Credit Sub-Account.

Our growers only want to get together if it can be done competitively and if it can be done for the long-term. Your stated target prices and caps give certainty to our analysis, and we are most appreciative of your efforts to make sure that our concept is a given chance to prove its viability.

We've been encouraged by the positive initial response we have received by both the investor-owned utilities in our area. And we look forward to working with the Energy Commission in what we believe can be a win-win situation.

Thank you.

COMMISSIONER MOORE: Thank you.

Laura Scher.

No, I'm not going to ask you to take them back with you, but I should point out that we were impressed with the volume that you generated. And you certainly made an impact. I want to commend you for the effort that you went to to release my name to everyone on your list and World Wide Web, but we were impressed.

So you gave us an additional weapon to use at the Legislature to show the strength of interest in this and also to suggest the role of aggregators in the future. So for that, I'm appreciative. I know the Staff is a little overwhelmed by -- I haven't gotten these.

MS. SCHER: Well, thank you. I guess I might say I'm the infamous Laura Scher, a CEO of Working Assets. And my mother would have made me apologize for all the extra work that we've given you. But I guess I can't because I feel like we finally have the California citizens here in the room expressing their opinion, which is clearly that they are very interested in buying renewable power.

So instead of apologizing, I congratulate the Working Assets' customers on once again making their voices heard. And I do look forward to working with you to make sure that this doesn't put too big a burden on the Staff in communicating with all those people what your policies are going to be.

And just so everyone understands, all that we did was make it easy for our customers to express their opinions. This is sort of a hallmark of our phone service. We didn't write those letters for them, we just asked them if they wanted to speak out.

In addition, we were clear that we intended to enter this industry if it's structured correctly. But I'm still shocked by how many postcards and letters you've received, since you had over 13,000 this morning and there's a new tray on top of that.

COMMISSIONER MOORE: Nine hundred and sixty more as of this morning.

MS. SCHER: So it's clearly an outcry from the California customers. And it's really solid evidence of the consumer demand and should help get this through the legislation.

I also want to thank you for allowing me, Working Assets,

and the California citizens to participate in this process. We believe that we're at a crossroads with your recommendations.

One path will lead to a thriving renewable industry continuing way past 2002. The other will assure that the renewable industry dies once the subsidies are used up, that the industrial users will choose price over any other consideration and that the residential customers will buy their generation from the utilities who will have become basically unregulated monopolies on the generation side.

As we stated before, the only way to go down the first path and to ensure this thriving renewable industry is to use the money from AB 1890 to build a thriving consumer renewables market.

And the only way to build that is through allocating as much as money as possible for rebates for residential customers and to make those amounts fixed and reservable. Anything less doesn't lead to a thriving renewable market. It's clear that only the residential customers will pay more in the long-term.

I speak as someone who has extensive experience marketing to environmentally conscious customers. Working Assets has been doing this for eleven and a half years in both credit cards and telecom and as an environmental consumer who wants to buy renewable power starting on 1-1-98, as do all those people right there, and available well after 2002.

The way the incentives are proposed to be allocated, on page 34 of your Report, makes it impossible to optimize their value and will make the customer incentives useless, defeating the intent of the \$540 million.

To get our residential customers to leave the utilities, we need to have a few things. One is in the hands of the CPUC. And at least the administrative law judge has recommended full unbundling of the revenue cycle for residential as well as commercial customers. And while at Tuesday's hearing Senator Peace disagreed with the residential unbundling, he did appear quite supportive of it for renewable customers. And we appreciate your support, the Energy Commission, of residential aggregation.

The second is that we need to offer the customer a

certain, fixed price. We can't offer them a variable price and we certainly can't offer them a price after the month in which they buy the power. So this price may periodically change. So the customers need to be informed of that change in advance, not in arrears. Thus our costs need to be certain.

The proposed allocation method has absolutely no cost certainty built in. Building a consumer market will require significant resources. We and other marketers are fully prepared to make that investment in the future of California's environment and to deliver over one million customers willing to buy and desirous of buying renewable power.

To do this we must have a certain business plan where we can predict our costs in advance. We therefore continue to require an allocation method that is reservable and fixed on a first-come, first-served basis as proposed in our January 22nd filing.

Under the phase-in provisions of your proposal, we would support an allocation this fall, which would reserve funds through the entire period and then additional allocations under the same mechanism each year as additional funds were added.

We would not support requiring the reapplication to serve the customers already signed up. But we do see that there will be new money added each year, and that that way we can address some of the concerns of other people in having an annual, new amount of money assigned and having a new reservation period.

In addition, we do ask that if others don't use their allocation, we'd like the rollover funds to go to customer incentives for the residential marketplace.

I appreciate your hearing our comments.

COMMISSIONER MOORE: Thank you very much. We appreciate your efforts, all of them.

MS. SCHER: Thank you.

COMMISSIONER MOORE: Thanks.

All right. Marianne Walpert. I apologize if I'm mispronouncing that.

MS. WALPERT: Thank you. No, your pronunciation was

fine.

Marianne Walpert from Pacific Solar. I am one of many small businesses throughout the State of California which is working to promote and install photovoltaic systems. And my position, as a familiar position of the photovoltaic industry, is going to be that the emerging technology allocation should be moved back to the 20 percent recommended by the CEC Staff and that this money should come out of the new and emerging allocations.

We've heard a lot from the large businesses, operating many megawatts of existing generation. And, in particular, I'd like to respond to Mr. Kelly's comment that PV is not compelled to get as cost competitive as possible. And I believe that's very definitely not so, and that the proposal put forward by the PV industry in general lays out a very definite plan of how the funds would be used. And that \$96 million would enable us to get to the point of cost of systems currently to something that would be truly commercializable.

And I think the SMUD program very definitely demonstrates the cost reduction process, as the number of systems purchased has increased.

One general comment I wanted to make is that listening to reviews of restructuring throughout the state, I'm impressed by the general notion that large businesses are benefitting and that the residential customers are, in general, not going to benefit -- although I am impressed with the Working Assets' plan, that's certainly a good plan -- but with the emerging technologies in particular, the participation in the photovoltaics program within the emerging technologies, it would give ratepayers, taxpayers and voters throughout the state an opportunity to very directly participate in the restructuring program and to purchase their own PV-generation systems, which would contribute to truly clean renewable generation and distributed generation throughout the state.

That's all. Thank you very much.

COMMISSIONER MOORE: Thank you very much.

Larry Slominski. Again, I hope I'm not mispronouncing.

MR. SLOMINSKI: Thank you very much. I am a business manager for the utility and building integrated photovoltaic products that our company manufactures. I'm from San Diego. Our company's headquartered in Michigan. We have a sales and distribution office in San Diego. We have six or eight employees down there. And we also have a Mechiliadoro [phonetic] plant in Mexico.

I'm here to voice my support for the photovoltaic industry's proposal that was submitted. I think it is on target in terms of identifying where the market is.

And until I had really fully read through the last few pages that really are commenting about -- in your Report here -- and providing a little bit more background on the justification for emerging technologies and how that would be handled for the solicitation process of RFPs, I didn't think that the body here really understood the markets that we are most competitive in now and which are most near-term commercial. And it very much is a distributed generation market at the consumer level for commercial or residential applications.

I brought with us one of our products, which is the environmental product of the year by *Popular Science* magazine. It's a nail-on solar electric shingle. We definitely are introducing it into the market this year, UL rated, and ready to offer to consumers at the residential and commercial level. That is the distributed source we're talking about.

And it was very confusing to me on page 17 the descriptions of a project basis. Winning projects would be awarded by certain funding at the end of the year.

That is more detailed, explained in more detail in the back few pages. So I think now that you, as a group, understand the issues involved and the different kinds of markets that the different technologies represent. But I don't understand and would like encourage you to move ahead quickly with the proposal as put forth by the PV industry. And I don't see the need necessarily to delay the implementation of that proposal, because I think it is the same proposal that would be submitted a year

from now.

We've worked very hard on that proposal to be submitted. And I think it's not necessary to delay it, at the risk of not capturing companies like ourselves and other industries coming into the state to capitalize on this market. It is moving very quickly. Europe and Japan are way ahead of us in the U.S. And at this time it's very crucial that the State of California step forward.

We have a very well prepared plan. And I think it needs to be implemented as soon as possible. Others in this group will argue for different funding levels. I just see the need to educate the market and enter it as fast as possible. And a year or two of delay, as recommended in here, may be more a matter of comfort among the authors of this with what this technology is and how it's applied than anything else.

And I'd like to have you reconsider that issue of implementing that program as fast as possible. That's all I have to say. Thank you very much.

COMMISSIONER MOORE: Thank you very much. Appreciate your comments.

Mr. Wenger.

MR. WENGER: Hi. Howard Wenger with the Photovoltaics Coalition, as it were. You've heard from various people that are part of the Coalition.

I want to say that -- I want to start out on a positive note and then quickly regress to a very negative note. We're very pleased with the recognition that an upfront, multi-year allocation is required for commercializing a technology. And that's reflected in the Committee Report, and we're very happy with that change from the Staff Report.

We're also very pleased with the recognition that market-based mechanisms are crucial for implementing this technology. And that's reflected in the report.

What we're very unhappy with -- and that's putting it mildly -- is the reduction of the emerging allocation from the Staff expert recommendation of 20 percent to a 10-percent

allocation, as you might imagine.

I have spoken with various people about this that are part of our group and outside of the group, very stakeholders, and sort of the common response is, "Geez, you guys really got shafted."

But it's not us that are getting shafted, it's really the consumer that wants to put PV on their rooftop. It's the environment. It's the jobs that won't occur if this allocation remains at the level that it's at right now.

I have just two viewgraphs, if you'll indulge me, to illustrate this point.

COMMISSIONER MOORE: This may be a little tough. I'm not sure that we're prepared to do those. Do you have them?

[Pause to set up viewgraph.]

MR. WENGER: These bars represent our multi-year program that we submitted in November to you. The dark colored-in portions of this multi-year program is what will occur with the present level of funding. And this is assuming that we get the majority of the funds of the 10 percent, which I'm somewhat dubious about when I start hearing about fuel cells and microhydro and even wind, solar dish, solar tower, biogas, as possible emerging technologies and competitors for the funds.

I'm confident we'll do very well in the solicitation, because I think we have the most promising emerging technology.

The bottom line is that 10 percent is just not going to do it. There's no funding for the growth and transition phases of our program. And what you'll get is perhaps 10 to 15 megawatts of PV, which is impressive, but you're not going to fully develop the technologies and transition it to sustainability. You're simply pulling the plug in the initial portion of the program and not funding the critical growth and transition phases that we need to get this thing to sustainability.

COMMISSIONER SHARPLESS: Do your charts take into consideration any of the SMUD money or other money that might be coming from other sources, or is this just looking at the 1890 money?

MR. WENGER: This is looking at the 1890 money.

COMMISSIONER SHARPLESS: So if we were to see other funding coming in, --

MR. WENGER: What funds --

COMMISSIONER SHARPLESS: -- that picture would look somewhat differently?

MR. WENGER: Certainly. What funds are you referring to?

COMMISSIONER SHARPLESS: Well, we heard from SMUD this morning.

MR. WENGER: Well, that's funds that they will use for their own purposes. They won't be part of this program, which is truly a customer-oriented program --

COMMISSIONER SHARPLESS: And it wouldn't help this program at all?

MR. WENGER: It would, but in a tangential way because the funds that they use is for utility. They own the photovoltaic systems.

What we're trying to create is a market-based program that will be truly competitive amongst all vendors. Whereas SMUD goes out and has relationships with vendors and, in fact, they're establishing longer-term relationships to procure five and 10 megawatts of PV. So I think it will help but not in a direct sense.

COMMISSIONER SHARPLESS: And you don't see any other funding probates as a result of the State of California putting in a certain amount of funding on PV. You don't see that this would leverage any other funding possibilities?

MR. WENGER: Not any more than any other technology that's before you.

COMMISSIONER SHARPLESS: Well, that's good news, because that probably means yes, you do.

MR. WENGER: Okay. Great. Double thumbs up.

We're not counting on it, but certainly we would welcome it. And it's crucial, especially considering the level of funding that you've allocated at this point. That's the harsh reality.

COMMISSIONER MOORE: Let's see your second --

COMMISSIONER SHARPLESS: Yes.

COMMISSIONER MOORE: -- table, chart.

MR. WENGER: Okay. The second slide is just sort of a view of what the future of renewable energy resources are for California. This is taken directly from a report published by the CEC in 1991 that shows that of the total potential for renewables in California, solar technologies clearly dominate the picture by a five-to-one ratio. Five-to-one over all of the technologies combined.

The message -- whereas the funding is the reverse situation through 1890. I guess the message I just want to convey is -- and you've heard it -- is that PV is unique. It's perhaps the only and best renewable energy technology for self-generation or distributed generation. Geothermal's not going to give you self-gen or distributed gen. Biomass is not going to give it to you. Wind can't give it to you.

I want to conclude by urging the Commissioners to do the right thing, to make an investment and leave a legacy that you'll be proud of. And we urge you to increase the allocation to the 18 percent that we requested for PV.

We believe that there's two areas that those funds could be taken or shifted without unduly impacting these two areas. The first area is in the new technology area. Seven percent of the funds from the Staff Report -- the new technology area got a seven-percent increase, absolute increase from the Staff to the Committee Report.

Looking at just sort of back-of-the-envelope calculations, if you take the 1-to-1.5-cent-per-kilowatt hour incentive, you're talking about 3- to 450 megawatts of new renewables that would be funded through that 30-percent allocation.

Frankly, with the constraints that you've imposed, namely that the new renewables have to be out of their S04 contracts and only 25 percent of the funds can go to any one entity, we don't see where there's no renewables are going to happen.

So we would suggest that you shift five percent, say, five of the seven over to emerging from that account.

Another account is the Tier III Existing Account. In your Report in the Appendix you state for all these technologies, geothermal and landfill gas and biogas or municipal solid waste, that they're cost-effective, generally cost-effective, and don't require additional subsidy. That they're already there. This is your language in the Report.

Therefore, we ask ourselves: Well, why are they getting a full five-percent allocation, which is half of what you've allocated for emerging if they're already there? This is another account that we think funds can be shifted.

Again, we're urging you to do the right thing. We appreciate being a part of this process and your hearing us out.

COMMISSIONER MOORE: Thank you very much.

MR. WENGER: Thank you.

COMMISSIONER MOORE: Mr. Sowter.

MR. SOWTER: Good afternoon. Commissioners Sharpless and Moore, I'm Richard Sowter. I head BP Solar in the USA. I am appearing before the Committee today to speak in support of AB 1890 funding for emerging photovoltaic technologies, which we believe will have significant importance for California's future electrical energy security and its economic well-being.

The opportunity for photovoltaic as an emerging technology is as a distributed power system and not as a centralized power plant. The cost-effectiveness or competitiveness is seen much earlier than with other technologies because the selling price is at the retail level, not at the baseload generating price.

Solar PV has distributed benefits. Solar, with the support of the Greenback Program, can be competitive with the price of electricity today. But in the future it has the capacity to also get down to baseload generating pricing. Hence, solar PV has a sustainable future.

PV is modular, small or large, and solar is reliable. Distributed power is reliable. You could even say it is

constitutional.

Lower prices for solar PV systems derive from high-volume, low-cost production. It is private investments that will build these plants as a result of demonstrated market demand. The Greenback Program stimulates the market to invest. Lower costs come from lower production costs. Large projects for centralized power could give lower prices today for solar PV. But the real value of solar PV are: One, it is modular; two, it has distributed benefit; and, three, it is reliable.

It makes the best economic sense to put these benefits to good use.

The Greenback Program is designed to stimulate the market. People need to become aware of the benefits. In restructuring of the utility industry, lower power costs will rely heavily on power being wielded through the existing power system. Restructuring will rely very heavily on these distribution networks. Their reliability is still to be tested as is their capacity in a restructured market.

Nevertheless, limits in this capacity of distribution will increase pricing in some cases. This is basic supply-demand economics. Big customers could lock up the supply or the capacity of the distribution system. Small domestic users may be constrained by the distribution system, and they may well have to pay higher prices.

Solar PV is a sustainable business, and it has no penalty to the added benefit of being distributed. AB 1890 can make PV competitive today.

The evidence of the German, Japanese programs is that a well structured program does stimulate demand. This, in turn, will stimulate private sector investment in supply capacity. The leverage that these market programs gives is substantial. For every dollar spent from AB 1890 Emerging Technologies Fund, it will yield many more dollars in inward investment and jobs.

This private investment in California will be significant if it is market lead. Nevertheless, there is a critical mass of market potential that would stimulate this investment. AB 1890

can help achieve this.

The Greenback Program of around \$100 million in market-based mechanisms sows the seeds for investment, for jobs, for leadership, for distribution power and for reliable power in California. Less money for the program would still work, but California may see its early leadership erode as other states seek to attract high-technology manufacturing businesses to their own states.

That solar PV is a sustainable business is borne out by the business that thrives today all over the world without subsidiaries. The reason is because electricity has added value when it is distributed. Ask a telecoms company what value they place for electricity on top of a mountain or an Indian village on the value of solar-powered lighting. Load-generating capacity is a commodity and is priced as such. It only has value once it has been distributed.

Solar PV is distributed. It has value and the business is sustainable and the energy is renewable. AB 1890 will make California attractive to private investment. Make the dollars of AB 1890 work. Make them generate jobs. Make them generate electricity for you and at homes throughout California.

BP Solar believes that the allocation for Emerging Technology can be wisely spent and will pay big dividends for the State of California and its citizens. Because emerging technologies and PV, in particular, has unlimited potential, we respectfully request that the funding be increased above the current 10-percent allocation.

Thank you.

COMMISSIONER MOORE: Thank you.

Michael Eckhart.

MR. ECKHART: Thank you very much for the opportunity to speak. My name is Mike Eckhart. I'm from Washington, D.C., and I've come here specifically just for this brief set of comments.

I'm working with a group of people from Europe and California on the development of a global solar bank. And we wish

to bring that here to California with your support through AB 1890.

I also stand to speak on behalf of the original PV proposal, which we would support, to have 20 percent of AB 1890 funds go to the emerging category, including PV.

In doing this work on a global solar bank, we've recently toured the entire PV industry worldwide, including Europe, the U.S. and Japan. And we found that there is a worldwide belief in the need to establish permanent mechanisms to support this important technology, over the temporary three- and four-year special programs.

There's four things needed to make photovoltaics successful anyplace in the world: The technologies has to be available; the manufacturing has to be there at full scale; the distribution and service network has to be in place; and there must be end-user financing the people to buy this technology.

What we are working on preparing is the end-user financing. Now it's important also to recognize that PV, along with other renewables, is a public-sector promoted, private-sector delivered solution. And therefore any financing solution we develop, by its nature, must be a combined effort of the public and the private sectors.

We're here to urge the allocation of a portion of the AB 1890 funds to the creation of a financial guaranty fund, which would leverage private sector dollars towards the financing of solar PV, specifically that the state would establish a trust fund, call it the "Solar Electricity Financing Trust Fund," into which you would deposit -- we are requesting five percent of AB 1890 funds.

This trust fund would issue a guaranty to a private-sector institution that would assemble and mobilize and distribute financing funds as a secondary lender to the lenders within the State of California for their use in the financing of solar installations.

This is a secondary market function very similar to what we have at the national level in the housing market through Fannie

Mae, Freddie Mac and Jennie Mae; through the student loan market through Sallie Mae; and for agriculture financing through Farmer Mac. These are government-sponsored enterprises that have been shown to work sustained over the long-term where the public sector credit worthiness is brought to bear to create the flow of private sector funds that are unlimited. And this is the key for this proposal: That a fixed amount of guaranteed funding by the state can create an unlimited flow of funds to your intended market.

Specifically we're asking for five percent of the funds. This suggests that the 10 percent that you've allocated to the emerging category is simply insufficient to support all the emerging technologies and PV with as many strategies, including the Greenback Program, which we support.

Now a guaranteed fund of 25- to \$30 million, we believe, would result in the leveraging of 100 million to 200 million of total capital for the financing of solar PV. So by your astute use of these funds, not just the philosophical allocation of amounts, but your directing of the funds to specific strategies within AB 1890, you can leverage tremendous amounts of other funds, in this case, private-sector funds to flow for the financing of this market.

Now the benefits of this plan are, first, it's market oriented and it's market driven. It allows the market to function with a minimum of regulatory oversight. It is not a subsidiary program. And you would be creating a permanent mechanism that would live well beyond the transition period, adding really a permanent addition to the renewable energy infrastructure of the State of California.

We also believe, on our review of the various programs, that this would be the only financing mechanism that the Commission would be recommending to the Legislature. Of all of the programs within AB 1890, this appears to be the only one. And, of course, AB 1890 points specifically to the desire to have market-driven financing mechanisms in place.

I will close by supporting what others have said, that in our worldwide review of the PV industry we've learned that as far

as away as China, India, South Africa, everywhere, the provision of mechanisms for end-user financing is believed to be the key to unlocking the markets for PV everywhere.

And, lastly, you need to recognize and appreciate that California is the center of excellence in the entire PV industry worldwide. The Japanese this year and next year are competing with you in attempting to take that leadership away. And through AB 1890 we believe you will not only be supporting the markets and the end users of renewable energy but you will be further reinforcing your state leadership in the photovoltaics industry.

Thank you very much.

COMMISSIONER MOORE: Thank you.

Les Nelson.

MR. L. NELSON: Good afternoon, Commissioners. My name is Les Nelson. I'm here today representing the California Solar Energy Industry Association, which represents a number of young, tasty members of the renewables industry.

As you can probably guess, Cal SEIA is very, very concerned with the 50-percent reduction that is proposed for emerging technologies on a percentage basis, much larger than any other technology in this most recent Draft.

And without repeating my predecessors on this point, we do strongly advocate increasing the emerging funds from the existing category, as it appears that there may be a possibility that the allocation and use of the new category will not be fully subscribed and may become available for that reason.

On another point, I have to once again reiterate Cal SEIA's strong disagreement with any inference that the AB 1890 legislation has any reference to intent regarding allocation for emerging technologies.

Twice now you've been reminded that the Legislature, although it did not speak in the form of the legislation, intended that the emerging technologies be funded at a level in the neighborhood of five percent, and this is just not so. It's not in the legislation. And hopefully you'll disregard any such assertion.

Two more points. One, Cal SEIA believes that the five-year warranty provision that is being recommended for any emerging technologies be also extended to any new technologies, any new plants. There's no reason why only emerging technologies would need to comply with a five-year warranty provision.

Finally, Cal SEIA agrees with Mr. Hinrichs' suggestion and assertion that power generated from renewable sources in the State of California should also be able to be sold and transported outside the State of California. The legislation appears to be silent on that point. It merely states that the plant must operate and be located in the state.

Those are my comments for today. Thank you very much.

COMMISSIONER MOORE: Thank you.

COMMISSIONER SHARPLESS: Mr. Nelson, could I ask you some questions? You have some legislation moving through the Legislature --

MR. L. NELSON: Yes.

COMMISSIONER SHARPLESS: -- that has a tax credit?

MR. L. NELSON: Yes.

COMMISSIONER SHARPLESS: It now has been amended to draw its funding from the \$540 million?

MR. L. NELSON: It's actually not been amended at this point.

COMMISSIONER MOORE: Really.

MR. L. NELSON: To my knowledge it has not been amended, although that --

COMMISSIONER SHARPLESS: Is it your organization's position that that's the way the legislation should be funded [sic]?

MR. L. NELSON: Our organization really takes direction from the author of this legislation. And while it -- my position would be that we would probably go whichever way Senator Peace, who is the author of the legislation, decided he'd prefer to go on this.

COMMISSIONER SHARPLESS: Okie-dokie. Thanks.

COMMISSIONER MOORE: Thank you.

Mr. McMannes, did I pronounce that right? I'm --

MR. McMANNES: Yes.

COMMISSIONER MOORE: -- going to apologize in advance, because I couldn't read your writing.

MR. McMANNES: No one else can either. I want to state that Bill Carlson's --

COMMISSIONER MOORE: Wait, let me get your name for the --

MR. McMANNES: Oh, I'm sorry. Yes. Tandy McMannes. I represent the solar thermal projects, the SEGS 1 through 9 Projects.

This morning Bill Carlson had represented the interests of the Coalition. And I want to state that we do support the comments made this morning by Bill Carlson and also Steven Kelly; just to make a clarification that he did speak on behalf of all of us.

But there was one point that I wanted to make that concerns me. Last night I did some of the economics on the proposal that has been put forth. And where I'm not personally here asking for more money, even though, like I say, I support the comments of the Coalition, I really am trying to keep the money that you've already allocated to us.

Our position is that the -- and what I'm talking about is what's on the Executive Summary on page 8. Our position is that the rates, the payment caps and the target price decline too quickly.

Let me just give you an example. At an average SRAC rate of 3.5 cents during the transition period, at the end of the period there would still be \$47 million on the table that was not allocated to the technology, to the Tier I technologies. That represents 35 percent of the money that you've currently allocated.

At 4 cents average during the transition period, that leaves \$82 million, or 61 percent. That is an awful lot of money to leave on the table. Certainly --

COMMISSIONER MOORE: You realize we're rolling that

per year?

MR. McMANNES: Yes, I realize that. And I'll be happy to present my numbers to the Staff so they can see what I'm talking about. But what you've got is, by the way that you've allocated the funds, maximizing them up front and declining over a period of time, you already have a natural decline process.

As projects come off the cliff and there's more and more units going after fewer and fewer dollars, the rate naturally declines. So as an example of an SRAC price of 2 cents over the transition period that would result in all of the money, all of the \$135 million going to the Tier I projects, the rates go from, in 1998, a penny -- if my math is right and I believe it is -- then to .76 cents to .5 cents to .4 and to .3. So the very process by which you've front-loaded the payments and the very process by which projects come off the cliff, there is already a natural decline.

What we'd like to do is we understand that you need to introduce in your Report some kind of decline in the payments, and we do support that, but what we'd like to recommend -- and here, again, these are comments in that and comments submitted by Bill Carlson -- we'd like to keep the cap at 1.5 cents and then make the decline not quite as steep. Go from 5 cents the 5 to 4.5 and to 4.

And what that would do is still leave an awful lot of money on the table at a 4-cent rate, an average of a 4-cent rate, but at least it would make 3.5 cents, a 3.5-cent average, it would take that money and allocate it to the Tier I technologies.

And 3.5 cents is not an awful lot for our projects, even though we're working very hard in bringing down our operating costs. We certainly hope to achieve a rate that's reasonable by the end of the transition period. We could desperately use the moneys during that time to make the capital improvements and other types of additions to be competitive in that post-transition period.

COMMISSIONER MOORE: You make your point.

MR. McMANNES: Thank you.

COMMISSIONER MOORE: Thank you.

Richard Scherer, Electro-Thermal Equipment.

MR. SCHERER: Good afternoon, Commissioners, ladies and gentlemen. My name is Richard Scherer. I represent -- my company is Electro-Thermal Equipment. We're developers of small and medium-sized cogeneration plans and distributed generation plants.

I'm here this afternoon to represent my company and some of my clients who are independent oil and gas producers.

I am requesting that the Commission recommend to the Legislature in its Report called for under AB 1890 that within the framework of AB 1890 the following items be incorporated:

One, that small power producers, as defined by the Federal Energy Regulatory Commission, be given the same status as cogenerators under AB 1890;

Two, that the Commission recommend to the Legislature to explicitly adopt Federal Energy Regulatory Commission criteria for defining waste natural gas and possibly modify that criteria to meet conditions particular to California;

Three, that there be a precise definition of self-generation and that AB 1890 assert, as does the Committee Draft of the Policy Report on AB 1890, that self-generators are not exposed to a Competition Transition Charge liability. And that's on page 10, paragraph 1 of the Report;

Four, that for purpose of allocating funds for the renewable industry, as called for AB 1890, that waste natural gas be granted the same status as the Policy's Reports Tier II landfill gas;

And, five, that applications for a 4 status, such as microcogenerators, cogenerators from waste and small power producers be made by the applicant directly to the Energy Commission or the PUC without the participation of the utility;

And, last, that microcogenerators, small power producers not be subject to the Competition Transition Charge.

First, addressing the first item, small power producers as equals to microcogenerators, AB 1890 gives a priority status to cogeneration. It is the policy of the State to encourage and

support the development of cogeneration as an efficient, environmentally beneficial, competitive energy resource. This is the same thing, the same rationale that would hold water for small power producers.

Essentially a cogenerator simply recovers heat that he uses in his electrical production process. A small power producer has no such heat recovery requirement. But a small power producer utilizes either a renewable or a waste product to produce electricity.

Addressing item two, that we need to explicitly include natural gas in the definition of "waste." The Federal Energy Regulatory Commission has propounded a criteria which defines waste. And what I gave to the Committee this morning, I have attached that criteria.

The goal is to make use of resources that would have otherwise not been used. This is a broadening of definitions to beyond that of just energy efficiency to resource allocation. California's rich in oil and gas, but it is critical that we explicitly recognize that which FERC has defined as waste to preclude haphazard wasting away of energy resources that could have gainfully been employed.

Further, in compliance with AB 1890's environmental commitment, it is revealing to consider definitions of waste within the framework of California's existing oil and gas industries and air quality concerns.

California's present air quality requirements have caused a tightening of standards for marketability of natural gas. Because much of the state's product natural gas is between 1100 and 1400 BTUs per standard cubic foot, a larger portion of California's natural gas has become waste gas.

New high efficiency industrial and residential burners simply don't operate efficiently on that range of gas. Rule 1146 and 1146.1 of the South Coast Air Quality Management District mandated the retrofit of boilers whose burners exceeded a capacity of 2 million BTUs per hour. We're talking about apartment houses 30 units and greater.

This equipment, when retrofitted, also has a problem with wide-ranging BTU contents. Further, the Southern California Gas Company has advised my clients that the American Gas Association standards are being further tightened with the introduction of natural gas-powered vehicles.

Prior to these new standards, the locally produced gas was acceptable as long as the local BTU content basically didn't exceed 1200 BTUs per standard cubic foot. The local gas was simply mixed with larger quantities of lower BTU gas from out of state.

With the new and coming standards, Southern California Gas has said mixing isn't an option.

Until relatively recently, to be classified a waste, a material must be both a byproduct of a commercial or industrial process and currently have little or no commercial value. The Federal Energy Regulatory Commission has found that a nonmarketable gas produced as a byproduct of distillate recovery was such a waste gas.

To avoid wasting an energy resource that would have otherwise been wasted, FERC is willing to allow a small power producer to utilize natural gas if that gas is simply not marketable.

FERC has determined standards, and without going into the standards in excruciating detail, I've left copies of those standards in the lobby, and I've made those available to the Staff.

The California Energy Commission recently made available a low-interest demonstration loan to one of my clients to generate electricity using very high BTU gas. The gas is over 2200 BTUs per standard cubic foot. Southern California Gas had demanded the elimination of this high BTU gas from being mixed with sales gas prior to be injected into the public pipeline.

The high BTU gas, called by management tail gas, is a byproduct of preparing much larger quantities of natural gas for pipeline transmission. The owners had already attempted to permit the trucking-out of this tail gas. The permit was denied because

the gas processing facility was located in the highly urban Rancho Park area of Los Angeles.

Without this electric generation process project, which is truly waste energy, waste by virtue of Southern California's increasing stringent air quality standards, the Rancho Park facility would close. And a closure would mean unemployment. It would mean 2,000 royalty owners would no longer have checks that they rely on. And it would mean extremely costly abandonment problems.

If a CTC liability exists, this facility will close with the described attendant consequences.

Item three that I've asked you to consider is we need -- the Report is to be congratulated -- but we need an explicit definition of what self-generation really is. The preliminary report on AB 1890 asserts on page 10 that self-generators have no nonbypassable CTC. If self-generators must face a CTC, and he is either a microcogenerator or a small power producer, then he should have access to the same renewable funding in a manner analogous to that described in your Policy Report on ES-6 through ES-8.

The owners of the plant that I have described to you have written the utility. I'm the ghost writer that wrote the letter. So as of to date the utility has not responded in any meaningful way. The utility is Los Angeles Department of Water and Power.

Item number four is simply that it is up to the Commission to decide if they want to utilize a relatively plentiful, cheap source of fuel to manufacture electricity. If it's important to bring competitive power to the ISO, then I think it's important to incent the market to generate that power.

Item five, I guess would best be described as don't mix the chicken with the foxes. The common experience of all independent cogenerators in the post-standard all for 4 area, independent power generators which don't happen to belong to a sister of a utility can best be characterized as hostile. And that goes a long way to explaining why cogeneration, compared to its potential, has had a stilted growth.

In closing, I would like to comment that the effect of AB 1890 is ironic. Via its CTC it destroys the incentive to build new cogeneration and small power plants, the very sources of the electric power that the law seeks to encourage.

In my opinion, the functional effect of AB 1890 with regards to cogeneration is to violate the spirit of PURPA, the goal of nondiscrimination against new cogenerators and new small power producers, to say nothing of the spirit of AB 1890.

I call upon the Commission to ask the Legislature to remove the threat of a CTC from microcogenerators and small power producers and cogenerators that use waste in the production of electricity.

The spirit should dictate the reality of the law and not vice versa.

Thank you.

COMMISSIONER MOORE: Thank you very much.

MR. MASRI: Could I ask one question, Commissioner?

COMMISSIONER MOORE: Go ahead.

MR. MASRI: Do you produce electricity and heat from the waste gas or just electricity?

MR. SCHERER: It depends on the site, but, no. Most of the time it's just simply electricity.

COMMISSIONER MOORE: Thank you very much.

Mr. Burgess. Make sure that I've got this right: Mothers Energy, Inc. And you're from Zenia?

MR. BURGESS: That's correct.

COMMISSIONER MOORE: Where is Zenia?

MR. BURGESS: Halfway exactly between nowhere and nothing. In Southern Trinity County, California.

COMMISSIONER MOORE: Southern Trinity.

MR. BURGESS: The population is less than one per square mile.

COMMISSIONER MOORE: Distributed.

MR. BURGESS: Let me introduce myself. I am Ross Burgess from Zenia, California. And we've been there for four generations. Some of us would like to stay there and continue

what we can do to contribute.

With these hearings we are once again at a critical juncture. The legislation that will be based on this Committee's recommendations has the opportunity to retain and promote a level playing field by and between the nonutility generators, or it can create, I should say recreate, an artificial environment favoring one technology over another. That ignores the true value of economic competition.

Hopefully, you all have copies of what I'm reading from, and I will skip over some of the introductory comments regarding the ISO4, but not the conclusion.

I believe that, in fact, in the face of everything that we have accomplished with the ISO4 and the other standard offers, the Committee's recommendations that we split the technologies into tiers appears to conflict with everything we've accomplished to date and the intention of the legislation, AB 1890.

The attached exhibits, pages 6 and 7, demonstrate at least to the extent that the graphs and figures provided within your Draft document are accurate, the impact of the tiers and the brackets on the various technologies.

If the recommendations are adopted, those of us in Tier III that produce 46 percent of the alternative energy, will receive 8.2 percent of the funding that was intended to retain the existence of the alternative energy business.

If the historical shortrun marginal cost figures are included in the analysis, which they are not on those two sheets, those resources in Tiers III fare even worse.

Clearly not the intent of the legislation, nor will it further the creation of a level playing field during deregulation. If the Draft recommendations become law, I and the other nonutility generators will not only have to compensate the utilities for their sunk cost, we will have to do so by competing against other subsidized nonutility generators.

The Draft Report suggests that the recommendations are the equivalent of a near agreement or a consensus between the parties that participated, and that nearly all interests were at

the table. It is true that we all had an opportunity to be at the table.

However, I, having studied the legislation and participated to some extent in its creation, had no fear of a recommendation coming forth from this body. Therefore, I chose not to participate.

I also would like to advise you that I am not now nor do I believe most other small QFs are represented by those that were here. The economic burden placed on membership is so great that we cannot afford to be represented. So we are not. And to say that our interests are is a misstatement.

Getting to the point, I will make two recommendations. The first is germane to the existing document.

As it relates to the tiers and brackets, I suggest that they be disposed of in their entirety in the spirit of an open and fair market as PURPA dictated some 19 years ago; that the funds, as they become available, be distributed on a per-kilowatt produced basis to whoever and everyone that can, in fact, qualify as a qualifying cogenerator -- or a qualifying alternative energy producer that's in-state.

My second recommendation is based on the requirements brought forth the dilemma that's referenced -- a dilemma that the Legislature has had and is best evidenced by the statements found under 383(c)(1), where they ask for additional recommendations from this body as to how to treat the societal benefits from projects that are over and above the energy that they produce, such as biomass and waste gas and other projects.

In that context I am suggesting that we, for the first time in 14 years, recognize that a kilowatt's a kilowatt only where it's produced, that it's consumed locally in every case, that the current methodology average transmission line losses and giving everybody that average promotes the construction and operation of facilities in places where they're not needed and punishes those facilities for being by not rewarding them fully geographically located where they are needed.

During 1983 and '4, I participated in the Transmission

Line Study Advisory Group of the CPUC. This was an issue that was discussed at great length. There was never a consensus nor, at that time, was there potentially a capacity to be able to identify the actual losses associated with each microload area. Today we can do that. The utilities have proven it. And their responses to the bids for regeneration of different power plants, particularly in 1990, PG&E developed their capacity to do it in 0190, 09050.

That book, which I call "the cook book," was developed to demonstrate or to, in fact, quantitate the cost of bringing in energy produced elsewhere into the Bay Area to replace the Martinez plant. That same methodology had been utilized accurately to reflect the cost and/or benefit of the geographic location of biomass, particularly, small hydro and other facilities that are most often located where they have a load of their own that's served there. Their energy does not have to be transported a long distance to be consumed. It would help. It is new, and therefore I recommend it.

I can't help but conclude this comment with kind of a story that my grandfather often told in similar circumstances.

He had a neighbor that, faced with a problem that he needed to get more bacon out of his hogs, developed a way to do it. And basically what he did, and it may apply here, is that every day he would tie his hogs up by the back foot, and every day as he fed them, he'd move the trough a little further away and therefore he got more bacon.

Thank you.

COMMISSIONER MOORE: Thank you, Supervisor. We appreciate your comments. Thank you.

I saw Mr. White. He's next on my list if he's in the vicinity. John white.

MR. WHITE: My name is John White. I'm the Executive Director of the Center for Energy Efficiency in Renewable Technologies, CEERT. I'm also a legislative advocate for the Sierra Club.

And I want to, at the moment, suggest that my remarks are

generally reflective of what I believe to be the position of these constituencies, but I will take full and sole responsibility for them at the moment and let others revise and extend.

But I think it's important, particularly for the Sierra Club to be heard, because the environmental community is widely thought by the legislators as well as people around the country as having principally advocated and benefitted from the renewables funding provided in AB 1890. And, in fact, the renewables funding in 1890 is seen as a proxy for mitigating environmental damage as a result of restructuring, along with the other public purpose programs, RD&D and efficiency.

And I think that role of the environment being protected and renewed has sometimes been forgotten in the debate amongst all of the proposed recipients.

We were prepared today to come and to support the Staff's and the Committee's recommendations in general. We have issues, however, that, since others have raised them in their fashion, then I think we should raise them in ours.

We generally think that you've done a good job of balancing and weighing various claims and competing. I personally believe, however, that the continued insistence on the part of the existing producers for more money even than what was provided in your recommendation requires further reflection on what exactly it is we're doing here.

I think, in my opinion, 40 percent is enough, if not too much for existing projects. However, in the spirit of trying to move to this resolution, your 45-percent number had the virtue of potentially forging an agreement.

However, since the independent energy producers and the biomass industry have not been agreeable to that, I'd like to add a couple of concerns from the other side, the point of view.

I think it's very important that we recognize that the principal challenge, in light of the restructuring, is to sustain new investment in both emerging and renewable technologies, because I believe that the existing generators were provided for through protections in the 1890 and through formulas provided on

SRAC.

That having been said, I think it has been demonstrated at least for the moment that there are public benefits from existing projects that may be lost in the transition. This is the principal justification for allocating funding to them, is that there are public benefits not reflected in the prices that they will receive in the transition that could be lost.

However, I think that one of the things that you might need and probably do need to do some more work on in that existing category, is to try to match those public benefits better to the economic need for additional support and the availability of new dollars.

We were among those who argued in favor of the landfill gas technologies being included within the definition of renewables. However, we also recognize that the economic need of those projects varies considerably and that it probably doesn't make sense to just blanket give them more money just because everybody else is getting more money. On the other hand, you have to appreciate their point of view, that if others are getting more, why not them.

This gets to the issue of, well, how do we look at those issues. And we had earlier in the proceeding mentioned the need or the possibility of examining need for new funds for existing projects against benefits that might be lost if those funds were not received.

I know that no one, least of all the generators, wants to undergo scrutiny as to what their need is. I'm certain the landfill gas people don't any more than the other generators do. But I don't know how can you make a rational judgment, other than just give something to everyone that, in fact, a public benefit question arises if someone doesn't get supplemental support.

And I would think that it's still worth looking at, of some kind of matrix or some kind of mechanism for examining economic need for new funds in the transition against benefits that are present and at risk and impacts on the communities in which these projects serve.

I have to believe, and I talked to Staff about this some time ago, that in an earlier assessment that the Commission did indicated that there were some that didn't need it, there were some that needed it a lot and there were some that didn't matter if they got it, they would never be viable. And I think there is risk in people raising that issue.

But I don't know how you can properly line up benefits with need if you don't at least look. And so I think that, particularly as competition is so scarce for these funds, and since if folks don't have to -- if folks get money without having to do anything other than be eligible, then perhaps there's no incentive for anyone not to take the money.

Whereas, if you have some process to go through of explaining what you need the money for and why and what you contribute that's beneficial to the public, that perhaps that will diminish the number of applicants that will come in and give you a base.

On the other hand, I recognize administratively this could be a daunting task that could burn up a lot of Staff time and cause everybody to have to go hire counsel and so forth. But it seems to me that there might be a formula or a check list or something that could be gotten together that would not be so intrusive and that would, in fact, provide a means of weighing need, benefits in some way that would help establish the validity of these competing claims.

On the second, I have been troubled by reports that I have heard and some of the testimony about legislative intent on this whole issue. There has been some miscommunications already at the PUC. Of course, one of the legislator staffers apparently told the PUC that there was a sunset for the demand-side management in the low-income funds and that they should terminate those programs as a requirement of law.

Well, as we all know, that's not the case. And, in fact, the legislators wrote the PUC and said, "Absolutely we didn't have a sunset, and didn't intend one, and want the programs to continue."

I think similarly there has been at least an implication that staff to one of the members believes that the legislative intent was to terminate this program at the end of the transition and therefore you should not design any mechanisms that had a life beyond the transition, even if it was determined that those mechanisms might provide some benefits or some leverage or things of that nature.

I participated active in the 1890 process, and I believe it is fair to say that there was a clear intent to sunset and to not commit funds for renewables beyond the transition. But there was also an agreement, I believe at least implicitly, to take a look at that question as we got a little further down the road.

And I, in fact, had a conversation offline with Assemblyman, now Senator Brulte, who was the least supportive member with respect to the renewables funding on the Conference Committee. And he said, in effect, "You know, once my guys vote for this, this renewables stuff, you know, may turn out to be okay and maybe we can extend it into the future," so to me it's an open question.

And I think this Agency, one, needs to design mechanisms that, in its judgment and with all this input, look like they can make the right things happen, that you should not be constrained to develop solutions that might have life -- I mean clearly there's no new money available until we have further discussion from the Legislature. But I would not assume that you have to be done passing all the money out within the four-year transition simply because there is a sunset. I think that would be a mistake.

And I think, in fact, the legislators are just now beginning to think a little about what might come subsequently. Senator Peace has introduced the bill which has now been amended in a way that completely complicates this entire proceeding, because he believed that the solar energy technologies needed additional public support, based on his views about the benefits to reliability of distributed generation.

We certainly don't want those tax credit funds mixed up

and used to bleed off funds in this proceeding. On the other hand, I think it's fair to say that the Legislature is still open. And I think one of the things that, if not in this proceeding, soon, this Commission needs to provide some input to the Legislature about the need for public benefits of renewables to continue to be recognized after the transition.

At least it's my contention that while the Legislature chose not to include renewables funding for the period up to the transition, that part of that is we ran out of time, and as Ms. Rader has pointed out, the lack of a policy with regard to renewables after the transition is still something that we should recognize as a defect in the restructuring.

And what that policy is, I don't know. We've had different debates about different mechanisms. But I think the notion that public benefits for renewables are not reflected in the commodity price of electricity after transition is something that we pretty much can say now is the case and that we need to begin the legislative thinking and the process on what comes after. And I think that's something that would just come into your attention, if not now, at some point.

Lastly, on the question of disclosure of emission information. This is an issue that is unfinished business, as far as I'm concerned in the restructuring, and is something that needs to be a part of both your Report and the clean-up legislation.

I think it's also important that we not have all of the disclosure and reporting burden fall on the green sources with none on the brown. I think it's fair to say that all suppliers of electricity should be providing basic environmental information about fuel type, about emissions performance, maybe not an hourly or a daily or even a monthly basis, but certainly on an annual average basis. This data is readily available for some facilities from some sources, like EPA.

But I think we are going to have to tell the customers, particularly those that are interested in green marketing as a way to you unleash renewable potential, that we're going to have to communicate to the public what it is we're getting them to change

from as well as what we're asking them to change to.

So we are going to have to have disclosure to the customers of nonenvironmental -- and it's not just the environmentally benign products that need the disclosure, it's all of them.

And particularly in the case of residential customers, there's going to need to be a base case of the environmental attributes of what's in the pool that they're buying, what's the fuel mix, what's the emissions that will change, obviously, over time. But that's going to be what you're telling people that they're now getting. And it's going to be the standard against which you're going to judge the new products. And I think that's something, again, that this Commission is well suited to develop approaches.

There are concerns about confidentiality. I tend to think that both the retail providers and the generators need to provide information to someone. It may not be the ISO. It may be the Power Exchange, and it may be this Commission who compiles it. But this is an issue that's very important as time goes on.

Lastly, one of the things that has come up from time to time is we have looked at the incentive options available to the projects, the new projects, in particular, the intersection between state initiatives and federal incentives. The wind production tax credit, which we very much hope will be extended past 1999. Also the investment tax credit for geothermal.

The intersection of the federal financing and assistance with the state incentives has been an issue. I think we need to go a step further and have one of the tasks this Commission undertakes is to examine opportunities at the federal level for policies as they debate restructuring that support and advance what we've already done.

In particular, I think the federal portfolio standard proposal, which is in the Schaefer Bill, is one that I want to be sure it doesn't operate to simply move credits around and actually causes things to get built in California and elsewhere, that we have such a surplus of renewables relative to the rest of the

country. I think we need to examine how the federal standard will operate in terms of our objectives.

But also I think the feds have an opportunity to help us on financing with respect to new renewables. And the link that I think we haven't quite gotten is how are we going to take customer-driven markets, modest amounts of state support and leverage that and create financeable projects.

One of the big concerns that the producers have with the customer incentives is, "Gee, I'm not sure how that works to get my projects built." I think financing, both of the kind that has been discussed in this proceeding and the new idea that was discussed today on the Solar Bank is certainly in that category. I like to call it "Sunny Mae" instead of the Solar Bank because it really is a secondary instrument of the kind of Fannie Mae, that those kinds of instruments, while not something we've spent a lot of time in this Commission talking about in this proceeding, are going to be important. And particularly the intersection of policy, financial assistance and financial markets in a competitive environment where a customer demand is a factor in the new market.

So I would just urge, as this proceeding winds up, that you not lose the opportunity to keep providing leadership and input both to the legislative process here in California and potentially to provide some assistance to policymakers in Washington.

Those are my comments, and I will answer any questions.

COMMISSIONER MOORE: Appreciate it. With that we're going to take a 10-minute break.

[Break taken from 3:15 to 3:30 p.m.]

COMMISSIONER SHARPLESS: If we could reconvene. There are probably some people outside that need to be brought back in.

Commissioner Moore will be back in about five minutes, but we are going to go forward in the interest of time and take our next witness, who is Wayne Rafflesberger. I'm sorry. I messed up the name.

Hello, Wayne.

MR. RAFFESBERGER: Thank you, Commissioner Sharpless. It's pretty close. It was pretty close.

First, do you have my remarks? I have more copies here.

COMMISSIONER SHARPLESS: I've been keeping track of remarks, and I don't believe I have yours. So if you have some, bring them forward.

[Mr. Rafflesberger distributes written testimony to the Committee.]

MR. RAFFESBERGER: Thank you, Commissioner Sharpless and soon to be Commissioner Moore. I trust he will be here.

I am Wayne Rafflesberger with Coast Intelligent, Inc., a manufacturer of small microcogenerators, who has been before you now it seems like enumerable times.

I want to start off with maybe a paraphrase of the vernacular: Don't show me the money. As you know I have not been asking for, since last summer in front of Senator Peace's Committee, a subsidy, as it was characterized or mischaracterized today by one of the utilities. We are not asking at this point for your money nor any of the other good people here's slice of the \$540 million pie.

I have always been asking for simply status quo, to allow us to compete in the deregulated world. But that requires the kind of relief that your own Report correctly concluded, and with which I concur. Your Staff has done an excellent job on their economic analysis in the Appendix of demonstrating why, as other speakers have confirmed that today on microcogeneration, layering CTCs on top of a voided load, electricity you're not using after putting in microcogeneration, would in fact kill off the project and probably the industry.

I don't think there's a lot of doubt about that. The remarks that were submitted today by SDG&E, and I realize they haven't spoken yet, but I read their remarks, are incorrect in that statement. They conclude that no help is needed for microcogeneration. It doesn't need any assistance. That is obviously directly contradicted by your own studies, which again I

endorse.

The only point that I would add about that aspect of your Report is the January Staff Report specifically recommended an exemption. This Report specifically says that an exemption is one of the mechanisms that could be used, but falls slightly short of actually recommending an exemption.

And I think if you look at it again, I would urge you, Commissioners, to do so, that kind of recommendation specifically is certainly justified by your own work. So I would ask you to take a look at that before you finalize your Report next month.

The other remark that I would make today is on demand-side management. It was in your January Report, although not the appendix material, but the statement that microcogeneration as a demand-side management product was in there. That statement is not in this Draft.

I talked with Staff about that. They shared with me their research and their write-up which would be in Appendix, and suggested that it might be inadvertent. It might have just been edited out from this version. I would urge you to ask or direct Staff or work with Staff to put that language back in there, at least the Appendix, which is relative short.

It's a very good summation by your Staff. It cites folks like EPRI, the Energy Information Association, your own CEC treatment in the past of cogeneration as a DSM product, and makes the compelling case for that.

I would reiterate something John White, who testified a moment ago, said to you back in October when we started these proceedings, when he testified that in their opinion microcogeneration is a demand-side management product, too.

Finally, the last thing that I would say is in response to something that was filed after the January hearing. It was not in the remarks that Edison submitted today. However, it was in a letter they submitted in late January which purports that Edison's NOx emissions in the South Coast Basin are, in fact, cleaner, substantially cleaner than microcogeneration in that same Basin.

We looked carefully at the chart and the graphs that they

cited as part of their letter as an appendix. Using their data on a best-case scenario and looking at our microcogenerator -- because the product that was mentioned in there is a 500-kilowatt microcogenerator, undefined, we don't know whose it is. It's certainly not ours. Ours is a 60-kilowatt machine with a catalytic converter.

Our machine tested just last week by a CAB certified laboratory in Ventura County, machines that have been running for three years nonstop. So these are not something new right out of the factory where we're trying to in some way Mickey Mouse the data. They're just the machines as they run every day.

If you took the SCAQMD standard, which they allow, which they make us qualify to, for NOx emissions in their Basin, and compare it to what we are actually operating at in Ventura at the moment, and any of our units therefore, we are 20 times cleaner than what the South Coast is asking us to comply with.

There isn't any way that Edison is competing with us on air emissions.

Finally, Edison suggested today that to put in microcogeneration would be substituting a less cost-effective technology than using Edison. I submit that that is a -- just as the air quality emissions information is a decision for South Coast and not for the Energy Commission -- we're happy to work with the Air Quality folks and we have been for years. That's their decision, not Edison's, as to what emission standards are in the South Coast Basin.

Similarly, it's the marketplace which would determine cost-effectiveness. If our product is not cost-effective, it's not going to be installed. They only work when there is a need for the thermal energy as well as the electrical product. They only pencil out that way. That's why we don't sell tons and tons of these units. That's why there aren't a lot of us in the business any more.

But the ones that do work and that are installed are cost-effective, or they wouldn't be installed in the first place.

Thank you very much. I would be happy to answer any

questions.

COMMISSIONER SHARPLESS: Thank you. No, your comments are very clear.

MR. RAFFESBERGER: Thanks.

COMMISSIONER SHARPLESS: John Schaefer. Okay. Clean Power Works.

MR. SCHAEFER: You have copies of my comments?

COMMISSIONER SHARPLESS: Yes, I believe we do.

MR. SCHAEFER: I'm John Schaefer with Clean power Works.

I'd like to echo the compliments of others who preceded me in terms of the quality of the Report and the process that produced it. The decisions that we're making here are, in my opinion, very important and their importance is recognized by the quality of the work that the Energy Commission is doing in this area.

I'm gratified by the recognition on the part of Staff in the Report that consumers need to play an important role in what will be the deregulated industry after 2002 and hopefully after the 1st of January 1998.

Part of the difficulty in the industry structure that we see now is that consumers have no choice about where they get their electricity. And we also know that a vast majority of them would prefer to have renewable electricity sources.

If we can establish a mechanism in this 1890 process by which customers can obtain that choice, I think we can say the job is well done.

Specifically my belief is that customers will be confused about what's going on with all of this deregulation, CTC, renewable energy sources, different power sources and all that. So I would suggest for starters that the amount of money used for customer information be greater than the 5 million that's proposed, perhaps as much as 15 million.

And then I would like to take a look at the other 525. I'd like to give away some of this money, if I may. If we give 10 to the consumer information, that leaves 65 left that would have

been spent on customers. I would be pleased to give all of that back to the electricity producers if we could get them to sell electricity into that direct access market.

In that way, all the money would go to the producers. All of the cash would go to the producers. The aggregators don't need that money to start their companies or to get their customers. The producers do need their money to stay in business and to build new power plants.

However, the difference is that the electricity they produce has to go into a direct access market so that consumers can buy it. This will make renewable energy stick in California, I think, after 2002 and even when there is no more money coming from AB 1890.

In this way, the legislative intent I think is met because it does create a real market-based economy for renewable energy. The proposal could be much simpler. I won't speak to the allocation process, which is quite arbitrary and actually complicated, in my opinion. If we had a single value of cents-per-kilowatt hour are electricity that sold into the direct access market, it would be easier for people to understand. It would be for easier for me to write contracts with suppliers and with consumers.

Now that's a change, of course, from what we've had in the past. And it probably couldn't be done right away. But I might suggest that this requirement that all supported certifiable electricity go into a direct access market could be carried out by the end of the four-year period.

In the interests of time I think I'll refer you simply to my handout and the last page where all these points are summarized.

Any questions? Thank you.

COMMISSIONER SHARPLESS: Thank you.

COMMISSIONER MOORE: Mark Leary.

MR. LEARY: Good afternoon, Commissioners. My name is Mark Leary. I'm with Browning-Ferris Industries, one of California's largest privately-held providers of solid waste

management services.

I represent yet another coalition -- probably today's most overused word -- of environmental groups, solid waste management companies, municipal utility districts, including the City of Sacramento, county sanitation districts of LA County, NorCal Waste Systems.

I have a letter I will submit that you will receive by your eleven o'clock deadline tomorrow morning.

Really I wanted just to say simply that we are very much in support of the Energy Commission's efforts, your efforts of this Committee Draft. The Draft Report provides an excellent summary of the issues and complexities in implementing the renewables portion of California's landmark Energy Restructuring Act.

Further, the Committee has captured the recommendations of stakeholders who have participated in the process, including ours, in attempts to balance the many varied interests. We commend the Report. We'd like you to leave it as-is.

I'd also like to turn it over to my counterpart on this coalition, Jim Kennelly, to speak briefly about some of the comments that have been made today.

COMMISSIONER MOORE: Mr. Kennelly, welcome. Didn't have you on the list.

MR. KENNELLY: Thank you. I'm sharing his blue card.

And to start out with: Thank you. I'm here just to say that to you and to the Staff. You listened to the concerns that the cities and counties had presented, and we see a reflection of that in the latest Draft Report. And we appreciate that we support it. We realize there were tough compromises made by yourselves and your Staff, and we accept that.

We're somewhat bewildered but, I guess, flattered that some would still insist that renewable generation by cities and counties should in some way be discriminated against. And it's kind of interesting that five percent of the renewable energy generated in California would cause such a stir and would get people to investigate our industry and our finances and the tax

credits and all the things that go with it. But we'll just take all that as flattery and say again we support what you've done. And we thank you and we especially thank you for your fairness.

COMMISSIONER MOORE: Thank you very much. Hard to argue with those kind of compliments.

Tobbie Hopper.

MR. HOPPER: Yes. I'm Tobbie Hopper from the Central Valley -- Fresno specifically -- Valley Air Conditioning. We're involved in cogen plants in schools and colleges. And virtually I'm going to echo what you've already heard. And it must feel good sitting there hearing what's being told to you, but you've done quite a job.

Your last Draft I've sent out to 23 of different school districts. And there's people out there today breathing easier over your decisions on cogeneration. The only thing I may would like to emphasize on is cogeneration is also used in these facilities as a demand-side management. And obviously I think the testimonials that you've received from the school districts hopefully has helped in making your decisions.

I do thank you.

COMMISSIONER MOORE: Thank you, sir. Appreciate your coming all this way to say that.

Dick McCabe.

MR. McCABE: I think I'll pass. Everything that I had has already been taken care of.

COMMISSIONER MOORE: Thank you very much.

Nancy Rader.

MS. RADER: Good afternoon. My name is Nancy Rader with the American Wind Energy Association. Our renewable energy coalition didn't want to make a long parade out of this, so Bill Carlson made our joint statement this morning. I just wanted to make a few points.

First of all, John White insinuated that 47 percent of funds to existing projects is okay for all the renewables industries except for biomass and IEP. So I just wanted to say for the record that the wind, solar, geothermal and biomass

industries and IEP are in agreement on the comments that Mr. Carlson made today.

Also another point is that since Mr. White was a little unclear about whether he was speaking for CEERT, I wanted to say for the record that three CEERT members also support Mr. Carlson's and/or IEP's comments today.

The main point I want to make is to express our, AWEA's, extreme disappointment that the wind industry -- that virtually any chance for repowering in the wind industry is eliminated under the terms of your Draft.

Mr. Carlson outlined the minimum that we need to be able to support your Report in the Legislature. And we elaborate on the issue that he touched on in our written comments. But very simply, we urge you to recognize that landfill gas has a very different revenue stream than existing wind projects because of the Section 29 tax credit, which amounts to about 2.5 cents per kilowatt hour through the year 2002.

To our knowledge, landfill gas is the only class of existing renewable resource that receives tax credits certainly of that magnitude. That is a rationale basis for distinguishing wind and landfill gas.

There are many ways to address this issue, which we spell out in our detail in our comments and we hope you will pay close attention to those comments.

Now I just wanted to take my AWEA hat off for a moment and speak as a former Working Assets customer.

I don't know if my letter made it to the pile there in front of you, but I hope that you read that letter, too, because very few, if any, of those the people who wrote those letters in front of you have any inkling of the complexity of the issues that we're dealing with here.

All of the renewables industries want to foster a green market and recognize the necessity of doing that. We simply feel that rebates are the wrong way to get there.

And, finally, I was fooling around on my calculator and I figured that those 13,000 customers represented in front of you

could purchase about 0.2 percent of California's renewable energy generation.

Thank you.

COMMISSIONER MOORE: Thank you very much.

Our last speaker will be Bob Judd.

MR. JUDD: Commissioners, my name is Bob Judd. I represent the Biomass Industry Alliance. I'm honored to take the position usually taken by John White, that is, being the last speaker and having the last word, but in his absence I'll gladly step forward.

What Nancy Rader just said was in great part what I was going to say. Bill Carlson's comments this morning reflect the consolidated position of our biomass industry, the wind industry, the solarthermal industry and the geothermal industry and the Independent Energy Producers Association.

We felt that there was no need to go beyond the top tier items, that would gain our support for this proposal by belaboring a number of another comments that will be submitted in writing. And I do not propose to do that today, but you can take Mr. Carlson's voice as the voice of all of us without dissent.

The recommendations that he made today were based on recommendations that we made the first time this Committee met. And that is decisions that are made here have to be based in value. That is, there has to be a measurable, predictable return for the dollar invested in the situation where there are limited dollars invested.

We believe that the case has been well made by the existing technologies, that their benefits, electric and nonelectric, deserve additional support by the Committee.

We are sympathetic to the arguments that others have raised, particularly PV, but we remain puzzled at their reticence in disclosing the costs of PV and in discussing the extent to which PV technologies will actually serve a California market versus markets that are outside of the state or outside of the country.

Commissioner Sharpless had asked in the past the question

about why should we support the biomass industry if you can't get the cost-shifting done and how do we know that the cost-shifting will get done to get you to a market price. I'd like to address that very briefly.

We have been working very hard in the Cal/EPA process with multiple parties to define strategies for cost-shifting. Cal/EPA is in a final draft of its report, as you are, that lists a number of cost-shifting strategies, some of which are significant in themselves, others of which would be significant when combined. That report will come forward at the same time yours will.

In the interim, because of legislative deadlines, we have already initiated action in the Legislature to address cost-shifting for the biomass industry with two pieces of legislation that have been introduced. Obviously we cannot predict the outcome of these bills, but we are investing our time and our effort to take the mandate of cost-shifting seriously to meet market readiness at the end of the transition period.

So we compliment you. It's been a long road for all of us. From our perspective, working with this Committee has been a delight. It has been straightforward, clear, no hidden agendas. And that's a welcome relief to those of us on the outside. We thank you for that.

COMMISSIONER MOORE: Thank you, Mr. Judd.

With that I'm going to close this hearing. And we will take counsel with your remarks and you'll see the result of that in a draft that we send as recommendation to our colleagues.

But I just want to add one thing in closing, and I don't know whether Jan has some other comments or not, but I listened to remarks by Senator Peace partly in response to remarks that I was making in the Legislature the other day, and perhaps some of you were there when this was taking place.

And those remarks were directed at the players who, in effect, were thrown into a very tight coliseum and required to fight it out last August. And the scene was what Senator Peace described as "eating their young." And I realize, and I caught

the inference in one of the earlier speaker's comments, this is a hard place to be in. It's hard for us. It's harder, much harder, for people who have their livelihood tied up in this; it's on the line. We understand that.

But I want to say that in spite of the controversy and the potential animosity that would exist in all the players, I have a great deal of respect for the people who have come before us. There's been dignity in the kind of proposals that have been made to us. They've been thoughtful. Contentious, yes, but I expected no less.

If you hadn't fought for your positions hard, tenaciously, anyone who hadn't been willing to stand up and say, "I deserve it, but somebody else doesn't," who didn't have the temerity to say that, frankly doesn't belong in this forum. And so I'm very proud of all the players that came to this.

And I hope that when we forge our final consensus that takes us forward, we'll find general support for this, but you should know, and I think I speak for both of us, we have a great deal of respect for all of you and a great deal of admiration for the energy that you have put into in trying to lobby us fairly and squarely, if you will, on these issues. A very complex system.

And we had to come from a long way down the information curve to understand what you were talking about.

So, Jan, do you have...

COMMISSIONER SHARPLESS: Well, I think you've put -- your comments are very well taken with respect to this forum. And there's absolutely nothing I can add to that.

I appreciate -- we were all in a short timeframe. They weren't great times to be gathering together and trying to react to these things. And this is certainly not the only forum that all of us have had to deal with in many respects. I think that we owe a great deal of gratitude to those of you who have been so forthright in forthcoming in providing the information that we needed.

Obviously we always would like more information. It makes decisionmaking easier, but we don't always have the luxury

of doing that.

I would only add to Michal's comments that we recognize that there are many pieces to this puzzle. And the one that we put together for this Report isn't the only thing that's going to make this market work, that there are many issues still unresolved in the restructuring that are going to have an impact on how well the assumptions in our Report will, in fact, play out.

And I think that both Commissioner Moore and I sense the need to carry the policies forward not only to the Legislature but to the CPUC on issues that will allow these options and opportunities to the retail market that include issues of unbundling and metering and all sorts of things. So our job isn't done. And we can pat ourselves on the back for the amount of work we've gone through to date, but we don't have any illusions that this is it.

So thanks from me too.

COMMISSIONER MOORE: With that, we stand adjourned.

[Hearing concluded at 4:01 p.m.]

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CERTIFICATE OF REPORTER

I, **S. RICE**, a duly commissioned Reporter of **CourtScribes**, do hereby declare and certify under penalty of perjury that I have recorded the foregoing hearing which was held and taken at the **CALIFORNIA ENERGY COMMISSION RENEWABLES PROGRAM COMMITTEE HEARING on the Implementation of Restructuring Legislation (Chapter 854, Statutes of 1996 AB 1890): Renewables**, in Sacramento, California on the **27th day of February 1997**.

I also declare and certify under penalty of perjury that I have caused the aforementioned hearing to be transcribed, and that the foregoing pages constitute a true and accurate transcription of the aforementioned hearing.

I further certify that I am not of counsel or attorney for any of the parties to said hearing, nor in any way interested in the outcome of said hearing.

Dated this **4th day of March 1997** at Foresthill, California.

S. RICE
REPORTER